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ABSTRACT

Over 1,000 communities in 45 states, territories, and the District of Columbia, are mobilized under the AMERICA 2000 banner to reach the 6 National Education Goals. This collection of papers, written by those who have wrestled with the process of school reform, offers useful insights to communities as they begin their process of transforming education. Following an introduction by Lamar Alexander, Secretary of Education, are the following papers: (1) "The Process of School Transformation" (Jane L. David); (2) "Overcoming Barriers to Educational Change" (Michael G. Fullan); (3) "AMERICA 2000 and U.S. Education Reform" (Richard F. Elmore); (4) "The Need for Systemic School-Based School Reform" (Sophie Sa); (5) "Learning from Accelerated Schools" (Henry M. Levin); (6) "Key Lessons from the School Change Process in Prince George's County (Maryland)" (Michael K. Grady and John A. Murphy); (7) "Real Change Is Real Hard: Lessons Learned in Rochester" (Adam Urbanski); (8) "The California Partnership Academies: Design and Implementation" (Marilyn Raby); (9) "The Boston University/City of Chelsea Public Education Partnership" (Peter Greer); (10) "Restructuring Categorical Programs for Low Performing and Handicapped Students" (Stephen Fink); (11) "The Ten Schools Program: A Comprehensive Intervention for Children of Color" (Melba F. Coleman); (12) "Learning Lessons: The Process of School Change" (Beverly Caffee Glenn); and (13) "Achieving Fundamental Change in Education Within an American Indian Community: Zuni Public School District, New Mexico" (Hayes Lewis). (MLF)

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CHANGING SCHOOLS: Insights

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INTRODUCTION

In April 1991, President Bush launched a strategy to help America, community-by-community, reach six ambitious National Education Goals by the turn of the century. AMERICA 2000, that national strategy, has helped to establish a radical new agenda for rethinking our educational system from top to bottom.

Since it's a nine-year strategy and not a seven-second soundbite, AMERICA 2000 won't have instant results. Most of it is about helping Americans do things for themselves, in their own families, schools, and hometowns. But it has developed it's own energy and agenda. And now over 1,000 communities in 45 states, territories, and the District of Columbia are mobilized under the AMERICA 2000 banner to reach the six National Education Goals.

This collection of papers, written by those who have wrestled with the process of school reform, offers useful insights to communities as they begin their process of transforming education. This process is difficult and complex. There is no magic formula or silver bullet. The bottom line is that it involves patience and tenacity and a lot of hard work. Yet, as these papers make clear, once the plans are developed and the wheels put into motion, transforming education can be an exciting and rewarding proposition.

Lamar Alexander
Secretary of Education

THE PROCESS OF SCHOOL TRANSFORMATION¹

Jane L. David, Director
Bay Area Research Group

Jane David draws upon 25 years of research on education reform efforts to describe the ingredients critical for reform to succeed. These ingredients include (1) faculty support for change, (2) a realistic timeframe, (3) a source of innovative ideas, (4) ongoing access for faculty to new knowledge and training, (5) time during the workday for new responsibilities, (6) appropriate assessment (i.e., performance-based or portfolio assessment), (7) authority and flexibility at the school level, and (8) support systems that serve children's basic health and psychological needs.

David emphasizes that teacher-student interactions are just one piece of the structural change puzzle and that successful reform requires many parallel changes in the environment surrounding schools, including policies set by local administrators and school boards, state and federal regulations, and college admission requirements.

In this paper I draw on my own studies of restructuring schools and districts as well as on the last 25 years of research on education reform efforts—amplified by research in organizational change (public and private), cognitive science, and policy analysis. These bodies of research provide a strong foundation for understanding the process of improving schools. After briefly discussing the context for education reform today, I describe a set of critical ingredients for schools attempting to transform their organization and instructional program. I then point out the importance of devoting equal attention to changing those aspects of the larger system that present barriers to school-level restructuring and prevent even the best models from spreading to very many schools.

THE CONTEXT FOR RESTRUCTURING

From the curriculum projects of the sixties and the planned variation experiments of the seventies, we learned the limitations of top-down prescriptions and the importance of local context and culture in determining how reforms are—and are not—implemented. The late seventies and eighties brought wave after wave of 2- to 3-year "projects" to schools as well as more state requirements involving curriculum and course offerings, testing, and length of the school day or year. From these experiences we learned that reforms with visible impact on school

¹This paper was written for the U.S. Department of Education. The views expressed, however, are mine.

practices tend to be those that are relatively easy to do and fit well with current operations; for example, direct instruction and new reading series are more likely to be implemented than efforts to increase teacher collaboration and introduce hands-on learning opportunities. A corollary finding is that most mandates are implemented without affecting teaching and learning. In fact, even school-initiated improvement efforts have rarely been successful in creating changes in curriculum and instruction.

In the context of the national goals, the governors' commitments to restructure education, and AMERICA 2000, the goal of transforming schools is much more ambitious than previous reform efforts. It is to educate **all** students to high levels of performance. This goal requires fundamental change in what is taught and how it is taught. Moreover, it is change in the direction of something much more difficult to do. It is far easier to lecture, hand out worksheets, and administer multiple-choice tests than it is to plan and organize multiple activities that actively engage students, to create projects that require both individual and team efforts, and to assess progress in a variety of performance-based ways.

This ambitious goal for reform places the process of school change in a very different context. It is no longer a matter of determining the degree to which teachers have faithfully implemented a particular project or approach. For students to learn to communicate effectively, identify and solve problems, and work cooperatively, schools must operate differently. Curriculum and instruction must change; staff roles must change; how teachers and students spend their time must change; how students are grouped must change. The challenge now is to create the conditions that make it possible for school faculties and communities to transform their organizations from artifacts of the past to organizations of the future that are capable of continuous learning and improvement. This is a new agenda.

INGREDIENTS FOR SCHOOL CHANGE

What happens when school faculties are invited to make such fundamental changes in their organizations? There are several ingredients associated with significant change (by which I mean visible changes in what teachers and students do). School faculties and their communities are more likely to design and implement fundamental changes in their schools when the following conditions exist:

- *Faculty support for change.* Teachers as well as principals, and ideally parents also, recognize the need to change and trust that the invitation to change is a sincere one; that is, not simply another project or shift in direction that will quickly pass. Whether the invitation is a state grants competition or a local leader's request for volunteers, its sincerity is communicated by a realistic timeframe as well as the resources (assistance and training) and authority needed to transform teaching and learning. It is difficult enough to launch a major change process when participants support it; if teachers are not active partners, this process is impossible.
- *A realistic timeframe.* Restructuring a school is a long-term undertaking. It begins with one or more leaders—usually a principal or small group of teachers—who have a vision of effective learning environments. It is a 2- or 3-year process to translate that vision into a limited plan of action (creating a new cross-disciplinary course or

forming teams of teachers), convince the rest of the faculty and the community, identify the appropriate training and other resources, and make the necessary logistical arrangements (e.g., changing lunch or bus schedules). The greater the departure from current practice, the longer it takes for teachers and administrators to go through the stages from being aware of a new practice to knowing it well enough to appropriate and use it in new ways. But the process is more than a collection of individuals changing—it is also about transforming the culture of an organization from one that is bureaucratic and isolates teachers to one that fosters and values collaboration, problem-solving, and continuous improvement.

For example:

Teachers in three California suburban schools participating in a state-funded technology integration program have gone from no knowledge of technology to a variety of productive and demonstrable uses over a 4-year period with intensive assistance and outside resources. It will take at least that long for their instructional strategies to change in ways that foster thinking and use the technology to its full potential.

The 23 alternative programs in New York's District 4, providing options for all junior high students, were developed by teachers over a 16-year period.

Beyond schools, superintendents describe decentralization as a 10-year process; Xerox Corporation's restructuring was a 10-year undertaking.

- *A source for innovative ideas.* Educators and the public have limited imaginations about what schools could look like. Most of us went through 16 or more years of teacher lectures in schools that looked like egg crates or factories. Teacher and administrator preparation programs do little to change that image. To launch a process of change, educators need new ideas and images of effective practices and school organization. In some districts, this vision is provided by the superintendent. In some cases, state leaders provide new images. Some teachers have participated in innovative programs or curriculum and assessment design projects or are part of networks with other schools, universities, and consultants that support the exchange of ideas. Educators also pick up new ideas from visiting innovative schools.

For example:

Maine's Restructuring Schools program provided a full year's planning time for writing proposals, during which the state held conferences and information

sessions. Many of the successful grantees had been part of the University of Maine/Goodlad partnership.

The Coalition of Essential Schools, AFT Center for Restructuring, NEA Mastery in Learning Schools, and others facilitate an exchange of ideas among restructuring schools.

- *Ongoing access to new knowledge and training.* For teachers to teach in ways different from the ways in which they were taught and trained, they need knowledge of new content and alternative instructional strategies as well as awareness of the kinds of tools (including technology) and materials that are available. Teachers and administrators, as well as parents, also need to acquire skills for the new roles asked of them in leading, planning, decisionmaking, consensus building, collaboration, and evaluating progress. These are not skills learned from the traditional one-shot workshop approach or menus of district offerings. Teachers need onsite access to expertise and assistance—from their peers and from resident or visiting experts. Not every educator needs all these skills; in fact, combined with the need for time (see below), roles and staffing configurations need to be reconceived so these opportunities can be built into the working day.

For example:

The Gheens Professional Development Center of the Jefferson County Public Schools helped with the transition to ungraded schools in a variety of ways, including responding to requests for assistance, acting as facilitators for faculty discussions of plans, and providing background research on ideas under consideration. As teacher teams created curricular approaches, chose the appropriate instructional strategies and materials, and struggled with new report cards and appropriate assessment instruments, district staff met their requests for providing onsite experts, workshops and retreats outside of the school, and release time for planning and learning.

A new elementary school in Washington was designed by a core team of teachers and parents. They created a professional developmental model after determining the competencies teachers needed, and they rely on peer evaluations and peer assistance to determine and address needed skills. For example, a teacher with expertise in cooperative learning taught the approach to the rest of the faculty. The principal spends her time doing

"cognitive coaching"—helping teachers model thinking strategies.

- *Time during the workday.* Major school restructuring asks teachers and administrators to create different and more difficult jobs for themselves. To do so they need time to learn and practice new skills. They need time to interact with colleagues, develop plans, attend meetings, read professional journals, collect and interpret data. When these new responsibilities are simply piled on existing duties, staff quickly burn out. They also need time to communicate more with parents and other community members.

We have trained parents to believe that teaching is telling, learning is filling out dittos, and testing is picking the right answer from a list. When this changes, parents are uneasy and need to hear what is happening and why. Teams of teachers can provide some flexibility for scheduling time; similarly, technology can free teachers for other tasks by increasing their productivity in doing paperwork and communicating with parents.

For example:

Washington's Schools for the 21st Century supports 10 extra days for teachers to assume the new tasks associated with restructuring their schools (with a 6-year commitment).

The Lead Teacher pilot in North Carolina released each lead teacher (one in 10 selected by their colleagues) half time to assist faculty in identifying issues and a range of solutions, to acquire new information and to help teachers implement new ideas.

- *Appropriate assessment.* Although it is important to allow time for restructuring efforts to translate into the kinds of changes expected to influence student achievement, educators need ways of knowing whether their efforts are moving in the right direction. Because standardized achievement tests are blunt instruments, not suited to the goals of restructuring, teachers need knowledge of and access to alternative assessment instruments such as performance-based tasks and portfolios. Similarly, teachers need training in ways to conduct their own research and evaluation so that this is built into plans for change.

For example:

Vermont has been pilot testing a portfolio assessment system which portrays what students can actually do; it is designed to provide accountability and to stimulate professional growth and curriculum development.

California, Connecticut, Arizona, and other states are creating new assessments of student performance that demonstrate whether students can apply knowledge and solve problems in science and math as well as language arts and writing.

- *Authority and flexibility.* School faculties cannot reinvent their organizations if they are subject to constraining rules and regulations. Real authority requires budgetary control, the ability to define positions and hire staff, and freedom from restrictions on detailed curriculum objectives, testing, student grouping and assignment, and contact hours (or minutes) for subject matter instruction. Traditions and myths, lack of imagination, building architecture, transportation and food services by themselves are constraining enough. With layers of state and local regulations in place, even with the option to waive them one at a time, authority and flexibility to change are limited.

For example:

Teachers in an Ohio high school are reverting to fact-based drill from a creative and challenging project-based interdisciplinary curriculum in the face of a new state requirement for graduation—passing a minimum competency proficiency test.

- *Support systems.* Children cannot benefit from stimulating learning environments if they are not physically and psychologically healthy, nor can schools solve the health and psychological problems children bring to school. As the number of children growing up in poverty increases, schools—especially those with high proportions of disadvantaged students—must have support from basic health and social service agencies for children and their families before they reach school as well as access to such support for students in school. It is not surprising that in most cases schools able to make the greatest strides in restructuring are those in which faculty energies are not consumed in meeting the basic needs of students.

For example:

New Beginnings in San Diego has brought together leaders of the school system and social service agencies to ensure that coordinated services for children and their families are readily accessible at the school site.

A high school in Massachusetts with an influx of immigrants who have never before attended school, provides basic health services at the school as well as work-study and intensive language programs.

BEYOND THE SCHOOL

Clearly, creating these conditions requires concomitant changes in roles, organization, and governance beyond the school. Figure 1 represents the education system as it is currently organized. Previous reforms have primarily tried to change the piece in the center—the interactions between teachers and students. But practices in schools are severely constrained by the layers of interlocking pieces as well as by the expectations of educators who view improvement as a series of short-term projects and by the public, who want a return to the little red schoolhouse.

Unless the other pieces of the puzzle change in ways that support school-level change, each will pose insurmountable barriers for school faculties. For example:

- State and district standardized or minimal competency testing programs constrain changes in curriculum and instruction by focusing attention on what is tested—isolated facts in a multiple-choice format.
- Carnegie units and college entrance requirements lock high schools into their present course descriptions and work against an integrated, cross-disciplinary curriculum; teacher certification has a similar influence.
- Collective bargaining agreements that detail teachers' responsibilities and hours can preclude changes in teacher roles and in how they spend their time.
- How and by whom teachers and administrators are evaluated has a strong influence on changing practice; if teachers are judged on how quiet and orderly their classrooms are, they are unlikely to risk changing their practices.
- Schools cannot have authority and flexibility without actions by state and local policymakers; moreover, if district staff continue to be rule generators and enforcers, schools are unlikely to change.
- New kinds of leadership and commitment to change at all levels of the system, including efforts to obtain public support, are essential if educators, as well as students and parents, are to take yet another round of reform very seriously.

These are some examples of how the pieces surrounding the schools must change if more than a handful of schools are to change in significant ways. In education, expert knowledge about what constitutes effective workplaces for teachers and learning environments for students has always far exceeded our ability to put good ideas into practice. This is precisely because so many pieces of the system must change for schools to change significantly. However, if the system does not change in ways that support school change, we will never have very many successful schools—especially for disadvantaged populations. We know how to find exemplary schools. We even know how to create exemplary schools. But both approaches succeed because of exceptional people, unusual circumstances, or an infusion of resources. And they fade away once their main source of energy leaves.

FIGURE 1
THE PUZZLE OF STRUCTURAL CHANGE



In a nutshell, the process of school change is very difficult and takes a long time, even with faculties already dedicated to restructuring. The challenge for this decade is to create conditions throughout the education system that help schools invent, sustain, and reinvent effective learning environments. The ultimate goal is a whole system of schools that values continuous problem solving and improvement at each level.

OVERCOMING BARRIERS TO EDUCATIONAL CHANGE

Michael G. Fullan, Dean of Education
University of Toronto

Michael Fullan cautions that initiators of change frequently underestimate just how complex the process really is. Many projects are doomed because of the failure to understand the "implementation dip"—the fact that things often get worse before they get better. Fullan enumerates six barriers to successful change, and outlines a strategy to overcome them.

The author suggests that a vision of the desired change should evolve through the process of consensus building and accumulated experience. Ownership is something that grows over the course of successful reform efforts, not something that can be established in advance. In the final analysis, change stands or falls on the motivation, skills, and beliefs of teachers.

Practical research over the past 20 years has provided us with a growing sense of the do's and don'ts that make for successful change (Fullan 1991). In this paper I will discuss briefly the main insights emerging from this work about the process of educational change. The ideas are organized into three sections: What is educational change? What are the key barriers to achieving it? What insights and strategies are likely to overcome the barriers?

WHAT IS EDUCATIONAL CHANGE?

The foremost thing we have learned, which seems obvious but is usually misunderstood, is that change stands or falls on the motivations and skills of teachers. When one attempts to define the essence of change, the focus inevitably zeroes in on the teacher. We can ask what types of things have changed when a given instructional innovation or reform successfully takes place. Specifically, the core of educational change concerns alterations in teaching in at least three components:

- Material/structures
- Practices/behaviors/skills
- Beliefs/understanding

This is a static definition, but if a person considers the kinds of change facing teachers, most have to do with these three components. The first aspect—materials/structures—is the most concrete. It could be a new science curriculum, a new instructional method, new technology, innovative schools, school- or districtwide reforms, or a restructuring of the organization. Although materials and structures are important, one of our most important findings is that they

are the tip of the implementation iceberg. You can change materials and structures by policy fiat, but you cannot mandate changes in skills and beliefs.

The second aspect concerns the new behaviors, practices, and skills associated with a new policy or innovative direction. There are two critical implications here. One is that the question of newness is subjective in the sense that what counts is how much change in practice is at stake for the individual teacher. The other implication is that change is not just a matter of attitude. Skill and capacity count, as well as motivation and attitude.

Third, all substantial innovations involve underlying beliefs, rationales, or philosophies. Whether the change concerns how children best learn, what should be taught and why, or how schools should be radically revamped, those involved will have to come to understand and believe in the new assumptions and ideas that underline the reform.

The point is that all three components are crucial, and that we often see changes in one aspect without corresponding changes in the others. In other words, it is possible (indeed probable) that a teacher could use new materials without paying attention to the skills and activities that would have to be established to go along with the materials. People often behave in a new structure in traditional rather than innovative ways congruent with the purpose of the new setting.

Although the whole process of change is more complicated than we are now discussing, I believe that the best point of departure is the recognition that educational change in essence is the process of learning how to do something new; i.e., it is a process of redoing (behaviors, skills) and rethinking (beliefs, understanding) pursued through new materials, policies, and structures.

The discussion so far is independent of whether the change is voluntarily pursued or externally imposed, and independent of who has developed the ideas. In either case, the process of coming to grips with new skills and ideas is what counts.

At this stage we will not try to sort out the sequence of what does or should change relative to materials/structure, practices, and beliefs, other than to say that they are presented in order of difficulty. It is much easier to introduce new materials and alter structures than it is to develop new skills and practices, and harder still to obtain new beliefs and understandings (even if one is motivated to do so). Research has also shown that the first several months of trying something new are problematic. This is called "the implementation dip." In any attempt at something significantly new, things will get worse before they get better. Failure to understand this natural experience in dealing with new skills and understandings dooms many change projects (Louis and Miles 1990).

This definition also allows us to recognize how innovation relates to student benefits. Without getting into other complications that would divert us from the main point, the introduction of new policies, programs, and instructional innovations is ultimately intended to benefit students. Using the definition above, unless teachers establish new materials, practices, and understandings relative to a given reform, that reform cannot have its intended impact. Expressed differently, teacher change as described here is a necessary means for student benefits.

The initial definition of change is relatively simple, but it will be extended as more complex changes are considered. The discussion so far is relevant to single innovations, but it applies even more to larger reform efforts. The key question for state and national reforms, such as the creation of "A New Generation of Schools," is whether the strategies used will develop the kinds of educational materials, skills inside and outside the classroom, and sophisticated understanding that will be required by teachers, principals, communities, and students to make these new schools work.

As we turn to barriers and strategies, the overarching question is what kinds of factors or conditions inhibit or help teachers and others to work through a successful process of change.

BARRIERS TO CHANGE

There are many different ways to discuss barriers to educational change. I will focus on six problems closely linked to change because they are amenable to action and, if addressed effectively, can improve our success rate. But first we must understand them. Six basic change-related problems are

1. Overload
2. Complexity
3. (In)Compatibility
4. (Lack of) Capability
5. (Limited) Resources
6. Poor Change Strategies

These six problems interact in a downward spiral.

1. Overload

It would be hard enough if all schools had to do was to implement one innovation at a time. But schools are in the business of attempting to cope with multiple innovations simultaneously. Overload is caused by a combination of too many pressing needs and a political system that generates far more innovations than can be managed. In fact, it is probably closer to the truth to observe that the main problem in North American education today is not the absence of or resistance to innovation but rather the presence of too many ad hoc, fragmented, uncoordinated changes. Any strategy for reform that is going to work must address the problem of overload and fragmentation of effort.

2. Complexity

A second problem is that initiators of change have underestimated how complex serious change really is. It is complex in two senses. The first, and most obvious, relates to the development of new skills and the reality of personal anxieties and uncertainties that characterize the process of change for individuals—all the more complicated when these problems have to be coordinated in social settings to achieve shared solutions. Second, and less obvious, is that, in more radical reforms, we literally do not know what the solution will or should be at the early

stages. In other words, the solution has not yet been developed; the exact nature of the reform is not known.

3. (In)Compatibility

Another major problem concerns the philosophical compatibility of a reform with the personal philosophies of the educators who are to implement it. A teacher who believes in Direction Instruction will have great difficulty accepting Whole Language as the teaching approach to use. Elementary school teachers endorse mixed ability classes more often than secondary school teachers do, because of differing philosophical beliefs about the whole child. So, the question of basic compatibility with a reform must be confronted. But a point should be raised here. When people resist or do not implement an innovation, they may be doing so out of uncertainty rather than basic incompatibility. One can see how this problem also interacts with complexity and capability. If a problem is complex (unknown), and if we do not have the capacity (skills) to address it, it may surface as a matter of incompatibility: we are against the change.

Thus, (in)compatibility is a problem, but will be treated here as a variable. As people become clearer and more skilled in something and see that it has positive effects, the compatibility problem may vanish.

4. (Lack of) Capability

Because successful change involves learning how to do something new, it follows that skill and know-how are crucial. Probably the major barrier in dealing with complex changes is the development of the technical capacity needed to master the new situation or program. At the early stages of complex change, the costs (time, energy, and psychological costs) are high and the benefits (progress, impact) are low. Thus, when people are having difficulty or avoiding needed change, it may have just as much to do with capacity as it does with compatibility or beliefs. It is necessary, then, for any reform effort to include capacity-building (of the individual and the organization) as a foundation strategy. Developing skills and know-how must be seen as a natural and intrinsic part of any serious change effort.

5. (Limited) Resources

All of the processes discussed thus far require some additional resources—time, money, ideas, expertise—if the change strategy is to be successful. In Miles' terms, successful change projects are resource hungry (Louis and Miles 1990, Fullan and Miles 1991), which does not and cannot always mean money. There are many ways that effective schools create additional time and access to resources without adding to the budget. However, some significant additional money, especially in the form of time and expertise, is required for substantial reform.

A second and more subtle aspect of this barrier is what one might call "the evaporation of resources." Large-scale, politically backed reforms nearly always have millions of dollars attached to them when they are announced by political leaders. It is not a reflection on the integrity of change sponsors to say that teachers and principals at the ground level often do not see significant new resources. This is all the more galling when those who are struggling with reform hear public statements referring to the vast amounts of money allocated to that reform.

As others have observed, high-profile reference to reform initiatives and associated resources is as much a political and symbolic act as it is a substantial implementation act. Successful change projects convert this political energy into resources at the level of school reform where principals and teachers both experience and perceive that additional investments needed for change have been made.

6. Poor Change Strategies

This is something of a meta-barrier. The question is, do the strategies of change normally used address the five major barriers just discussed? There is overwhelming evidence that they do not (Fullan 1991, Fullan and Miles 1991). New legislation, accountability and monitoring schemes, one-shot professional development (no matter how inspiring), allocation of money, creation of new roles, wishful thinking, exhortation to leaders and teachers, appeals about the ills of society and the terrible needs of at-risk children do not in themselves form effective strategies for reform. At best, they inspire people to start or want to start. At worst, they create cynicism as people see reform initiatives come and go, and begin to believe that reform is political and marginal to their everyday demands and interests.

The overall conclusion, then, is that if a reform initiative is to have any chance of success, it must incorporate systematic and continuous strategies that confront and address (not necessarily resolve), the five major barriers outlined above. Up to this point, the change strategies themselves have created an additional barrier because, not only have they not worked, but they have made matters worse.

STRATEGIES FOR CHANGE

In this conclusion I will refer to some more elaborate sources on strategies for change, identify the main components that a set of strategies should contain in order to address the six obstacles discussed earlier, and discuss the timeframe required for success. These recommendations are based on recent research on the change process, as well as on our own three-year effort to achieve major change in the greater Toronto area in our Learning Consortium project (see Fullan 1991, Chapter 15).¹

First, there is no single answer to the question of what strategies are best, because it depends on the particular context and role or vantage point. To a certain extent, strategy advice must be particularized. We have done this elsewhere with respect to role—of teachers, parents, principals, students, district administrators, and governments (Fullan 1991); to themes such as establishing collaborative work cultures (Fullan and Hargreaves 1991); and to guiding propositions for success (Fullan and Miles 1991).

¹The Learning Consortium is a partnership of four large school boards (average number of students, 54,000) and two postsecondary institutions, set up in 1988, designed to work on teacher development across the teacher education continuum (preservice, induction, in-service, leadership) and on school development by coordinating the resources, policies, and practices of the districts and of the postsecondary institutions.

Second, given our experience in the Learning Consortium and other programs and our knowledge of the change process, what strategies would we recommend to the New American Schools Development Corporation? The six essential components are:

1. to develop a describable change strategy;
2. to engage in evolutionary planning and consensus building;
3. to employ technical assistance for all;
4. to focus on building collaborative work cultures in the school and community;
5. to work on school-district and school-external relationships; and
6. to establish an inquiring, problem-solving, monitoring mindset.

1. To Develop a Describable Change Strategy

Because previous strategies have been ineffective, crude, and unstated, it is necessary to make the change strategy explicit for all. This does not mean rigid strategy, but it does mean that the main components of the strategy are formulated, debated, and agreed upon. A relevant example is the Institute for Responsive Educators' (IRE) League of Schools Reaching Out—a national strategy involving 65 schools "to show how family/community/school partnerships can contribute significantly to school restructuring aimed directly at increasing the academic and social success of all children, especially those society labels 'at risk'" (Davies 1991:2). IRE explicitly states its strategy for reform, involving a national network of schools using seven core strategy components:

- ideology (a conceptual and value-based focus);
- felt need (participants who feel a need for substantial change);
- an action plan (in this case, parent centers, mini-grants, etc.);
- on-site help (skilled and committed field facilitators);
- recognition (recognition and visibility to participants);
- discretionary money; and
- "loving critics" (respect and useful criticism from third-party reform agents).

The point is not to accept this exact list, but it does represent the type of strategies needed. The change process is subtle, however. Although in the Learning Consortium we started with a guiding ideology and some felt need (points 1 and 2), the process of change was one of mobilizing greater and greater consensus and felt need. In other words, a program doesn't start with crystal-clear ideology and widespread consensual need but works toward it.

We did have multifaceted action plans that involved many components. These included summer institutes (5 residential days of training with school teams of principals and teachers and central office support staff); onsite follow-up; nurturing the informal/collaborative culture in schools; leadership training; provision of staff development and other resources; a spirit of inquiry that encompasses mini-grants, collaborative research between practitioners and academics, external case studies (loving critics), and formal evaluation; and use of the bureaucracy to buttress the change efforts—teacher appraisal, site-based management policies, leadership training schemes, redesigning preservice teacher education, and new induction programs. Onsite help, recognition, and discretionary money were incorporated in these plans.

Thus, the first requirement is to work on an overriding strategy with named components. The next five components contain additional ideas for what such a strategy should incorporate.

2. To Engage in Evolutionary Planning and Consensus Building

The best discussion of these twin processes is in Louis and Miles (1991, Chapters 8 and 9). The idea is to establish some guiding principles but to begin to work on them in practice as the route to sorting out and developing vision and consensus. In our experience it is a mistake to fix on a vision too early. It is better to identify promising themes (e.g., parent centers in schools, partnerships with other social agencies in the community and with businesses, student engagement in learning, building collaborative work cultures), to work on them, and then to forge consensus based on experience and growing expertise. The remaining four components directly feed into and support evolutionary planning and consensus building.

3. To Employ Technical Assistance for All

A caveat: Item 4 establishes a great deal of day-to-day assistance in collaborative schools, so we should not think of technical assistance as confined to designated workshops or in-service. Nonetheless, ongoing assistance involving outside facilitators is necessary. In the Learning Consortium it is difficult to be precise about the number of assistance days because the figure comes from so many different sources. For a staff of 30, an estimate is some 30 person-days allocated to small group or team in-service (e.g., two teams of five receiving a total of 3 days each), and another 90 days for whole staff professional development (the equivalent of 3 days per staff). Most of these days involve outside facilitators (school district or external facilitators). I do not believe that any useful formula can be established. The lesson, however, is clear: designated, ongoing technical assistance of high quality is needed year after year to bring about serious change. Similar in-service is required (often as part of teams) for administrators, parents or other community participants, and students if they are part of a change project.

Finally, technical assistance is more than direct in-service. It also means materials, ideas, time—i.e., resources more broadly defined. Louis and Miles (1990:242) suggest that a "floor" of \$50,000 to \$100,000 a year for several years is needed for urban high school improvement, but I would hesitate to attach a particular dollar figure in the abstract.

4. To Focus on Building Collaborative Work Cultures

We have worked extensively on building collaborative work cultures in Consortium schools, focusing on norms and practices of collegiality (peer coaching, mentoring, giving and receiving assistance); of continuous improvement (continually seeking and testing new ideas that work); and restructuring (developing a timetable and resources) in support of collaboration among teachers and principals (Fullan and Hargreaves 1991). This is very much a generative resource in two senses. First, these practices create, both informally and formally, what is tantamount to a great deal of day-to-day in-service and assistance. Learning among staff permeates the organization—see also Rosenholtz's (1989) "stuck" and "moving" schools. Second, collaborative work cultures provide the glue for technical assistance to be sought, to be used effectively, and ultimately to have an impact. No amount of technical assistance by itself (even if it is 20 days a year for the entire school staff) will have an impact unless it is linked to collaborative working relationships. When it does occur in these situations, its impact multiplies.

5. To Work on School-District and School-External Relationships

Although the school is the center of change, it is a mistake to focus only on school development. Individual schools can develop effectively for short periods of time despite the district, but they cannot continue to be effective despite the district. Eventually, hiring decisions, transfers, allocation of resources, policies, etc., affect the school, for better or worse.

Therefore, any school development strategy must attend to school district development. This is crucial to any long-term success. We do this in the Consortium explicitly. Consortium partners at the district level, backed by research ideas, actively work on reorganizing district practices so that they both support and press for school development. This means mission and vision development, hiring and promotion procedures, teacher and administrator appraisal schemes, site-based planning requirements, staff development allocation and policy, assessment and evaluation, and organizational structure at the district level. These normally segmented and fragmented components of a district's operation can be coordinated.

The general message is: In addition to the networking among schools involved in a common reform strategy, there must be a component that works on the relationship of the schools to their districts and to other schools in their district not involved in the project. Without this component, project schools will not continue to develop in the long run, even if they do in the short run. Moreover, the strategy recommended here actually uses school development projects as a catalyst or means of stimulating district (and thus other school) development.

6. To Establish an Inquiring, Problem-solving, Monitoring Mindset

One major implication arising from the set of six barriers to change discussed earlier is that the pursuit of complex change requires a risk-taking, problem-solving, inquiry-feedback mindset and corresponding mechanisms for action. In the Learning Consortium we have established a multifaceted approach. First, we have committed to and engage in constant inquiry, using as many opportunities as we can find to conduct our own and third-party studies and to disseminate the findings. These activities stimulate participants to think and question, expose them to other ideas in the research literature, and provide recognition through dissemination.

Second, we have established mechanisms or regular forums for monitoring and problem solving, such as a seven-person Steering Group (made up of one representative from each partner and the executive director) that meets, communicates, and problem solves regularly. Each school district, and each school within districts, has mechanisms for monitoring, such as school growth plans and assessment of progress. In some schools the practices are increasingly well established, in others not so. As Louis and Miles (1990) found, schools differ in their problem-solving capacity. Some ignore or don't identify problems, others engage in superficial coping, still others in deep coping and problem solving. The implication is that training in monitoring and problem solving needs to be part of school development strategies, provided that it is integrated with the other strategy components.

Third, we have done less systematic formal assessment, so we have less advice to offer here. Ontario does not have a well-developed assessment system for students, and there are simply no standard data available. We have a good deal of qualitative data, including some systematically gathered, on implementation of new ideas, overall system measures of teacher

collaboration, principal effectiveness using indicators from the research literature, and the like. After 3 years, we are only now turning our attention to student assessment and are currently considering a project on this aspect as we enter our second 3-year phase. We agree that more quantitative indicators of teacher and student progress should be incorporated earlier, although we caution that if done prematurely, prescriptively, or independent of a spirit of inquiry it will actually inhibit rather than stimulate further development. As much as possible, people within the project must be committed to seeking measures of impact.

CONCLUSION

In reflecting on the change process, one should ask to what extent does the approach selected actually address, as systematically as can be done, the six barriers to change identified earlier. Successful change projects are efforts in mobilization and positive contagion. Ownership grows throughout successful reform projects, not something that is established in advance.

Finally, let me talk about timeframe. For single innovations such as implementing a district-wide reading or science program, it will take approximately 3 years, assuming that good strategies are being used. For more substantial restructuring reforms our estimate is 5 to 10 years, depending on the scope of the reform (and again assuming that effective strategies are used). This does not mean the absence of early progress. Indeed, recognition and some early success is critical. But thorough change, well institutionalized, must be conceived in terms of sets of years. We made a 3-year initial commitment, with a provision for review and continuation for a second 3-year phase. In any case, more than 4 or 5 years in total will likely be needed.

There is much more to the subtleties of the change process. What has become clear is that both good ideas and good strategies must be part of the same mix. The latter will only happen if we conduct and learn from serious change initiatives that attempt to incorporate both reform ideas and reform strategies.

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AMERICA 2000 AND U.S. EDUCATION REFORM¹

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Although education reformers tend to equate change with improvement, Richard Elmore cautions us that good schools are not necessarily schools that change. "The problem with American schools is not that they lack the capacity to innovate; the problem is that they lack the capacity to build and sustain practices and structures over time that promote serious academic learning."

Elmore urges the creators of new American schools to examine history when seeking solutions to today's education problems and to identify clearly the fundamental design problems that must be solved if we are to move beyond the exhilarating phase of invention to the hard work of implementation.

We ask only two things of [the] architects of our New American Schools: that their students meet the new national standards for the five core subjects and that, outside of the costs of the initial research and development, the schools operate on a budget comparable to conventional schools. The architects of the New American Schools should break the mold. Build for the next century. Reinvent—literally start from scratch and reinvent the American school. No question should be off limits, no answers automatically assumed. We're not after one single solution for every school. We're interested in finding every way to make schools better.

—AMERICA 2000: An Education Strategy, p.7.

My assignment is to provide advice that might be useful to designers and developers of the New American Schools about the processes of innovation and reform in American education. I have written about school restructuring and educational reform in other contexts. What I would like to do here is to summarize a few of the major ideas and principles about educational innovation and reform that have emerged from my own work and the work of others.

¹This paper was prepared for the U.S. Department of Education to inform national policymakers, the New American Schools Development Corporation, and potential bidders for research and development teams for New American Schools. Some of the research used in this paper was supported by the Consortium for Policy Research in Education through a grant from the Office of Educational Research and Improvement (OERI) of the U.S. Department of Education (Grant OERI-G0086001 1) and The Governors Center at Duke University.

SCHOOL RESTRUCTURING AS THE ORGANIZATION OF TEACHING AND LEARNING

Before getting to the principles, let me set a general groundwork for the discussion. I find much to be optimistic about in the current interest of policymakers and educators in school restructuring. I think this interest in restructuring dovetails nicely with the school reform objectives of AMERICA 2000. At the core of school restructuring is the idea that the organization of schools should reflect our best theory and practice about teaching and learning. Rather than trying to shoehorn new ideas about teaching and learning into existing school structures (which usually means that neither practice nor structure changes), the basic idea behind school restructuring is that school organization should change, perhaps radically, to accommodate new approaches to teaching and learning. This is not a new idea. In fact, it has been around in precisely this form since at least the beginning of this century.²

The idea of redesigning schools to reflect ambitious conceptions of teaching and learning is also at the heart of the New American Schools initiative in AMERICA 2000. The New American Schools are supposed to represent our best collective ideas about the improvement of teaching and learning, and in acting on these ideas we should take nothing in the existing structure of schools for granted.

Although I am generally optimistic and enthusiastic about these attempts to rethink schooling from the inside out, I am generally pessimistic about the way innovation and reform have been practiced in American education. Let me state bluntly what I have written about with more subtlety elsewhere: The problem with American schools is not that they lack the capacity to innovate; the problem is that they lack the capacity to build and sustain over time practices and structures that promote serious academic learning. These are two very different problems.

For a variety of reasons too complex to unpack here, education reformers in the United States tend to equate successful schools with innovation. That is, good schools are schools that respond positively to the external pressures of reformers; good schools are schools that change. Granted that there is much that needs to be changed about American public education, I think there is substantial evidence against the proposition that good schools are schools that change. The evidence is of two kinds: First, there is evidence that since the early twentieth century American schools have been awash in innovation and that these innovations have had few, if any, positive effects on teaching and learning. Second, many case studies of successful schools reveal that once they have established successful practices they change very little, and when they do, they change only in very deliberate ways that are closely related to their core purposes, values, and practices.³

²See John Dewey, "The Situation as Regards the Course of Study," *Journal of Proceedings and Addresses* (Washington, D.C.: National Education Association, 1901), cited in Herbert Kliebard, "Fads, Fashions, and Rituals: The Instability of Curriculum Change," in Laurel Tanner, ed., *Critical Issues in Curriculum*, The Eighty-Seventh Yearbook of the National Society for the Study of Education. Chicago: University of Chicago Press, 1988, 16-31.

³See, for example, Richard Elmore, "The Paradox of Innovation in Education: Cycles of Reform and the Resilience of Teaching." Paper presented to the Conference on Fundamental Questions of Innovation in the Public Sector, The Governors Center, Duke University, April, 1991.

I am coming to the heretical conclusion that change as an objective of school reform is highly overrated and possibly quite destructive. American policymakers and educators have learned to use the rhetoric of innovation for purposes quite unrelated to the improvement of teaching and learning and have learned to act in ways that bring them recognition as innovators without ever touching the core problems of teaching and learning in any sustained way. Each successive generation of reformers ridicules preceding generations for having gotten the "solutions" wrong; each generation of reformers finds a way to claim credit for having changed the system in some way, without ever dealing with such recurring and obstinate problems as how to get students of increasing diversity to learn more effectively, how to get teachers to take more responsibility for student learning, and how to get students to take more responsibility for their own learning. Policymakers and educators have learned that change—in laws, regulations, structures, slogans, and symbols—is highly valued in itself, whether or not it has an impact on teaching and learning in classrooms and schools.

Many solutions to the recurring and obstinate problems of teaching and learning exist; most of these solutions have been around for a long time—at least since the early twentieth century. In fact, dedicated educators have developed many of these solutions into whole schools that have provided high-quality learning for diverse populations of students. Few of these schools survive more than a few years. Those that do survive for long periods of time are often private, independent schools, outside the public system, whose very existence is often disdained and discredited by policymakers and educators interested in public education. The main reasons why these solutions aren't disseminated more widely, I suspect, is that they are extremely difficult to implement, they require high levels of knowledge and commitment on the part of teachers and administrators, and they require sustained effort and support to become institutionalized.

I find it highly implausible that large-scale development efforts such as AMERICA 2000 will result in dramatic new breakthroughs in the practice of teaching and learning. I am willing to be proven wrong on this point. But I don't think the problem of improving American education is fundamentally a problem that can be solved with "breakthroughs." I think it is a problem that has to be solved with deep knowledge of history and practice, as well as long, sustained, hard work at the level of both theory and practice. Most of the solutions that will emerge from such work will not be novel; some may be.

A FEW PRINCIPLES

With these comments as background, let me conclude by sketching out a few principles about the development of schools that flow logically from my work and the work of others around school reform and restructuring.

Study History

The peculiar ahistorical hubris of American education reformers carries a high price. Typically, reformers believe implicitly that anything that has happened before them is (a) the cause of the problems they are trying to solve and (b) the result of a corrupt and self-serving system that can't be trusted. As a policy analyst with no other preparation in history than a good liberal arts education, I am constantly humbled by how much history has to teach us about the

promise and limits of current reforms. I would be willing to bet that virtually anything that the New American Schools propose as "new" structures and practices will have deep historical roots in earlier reforms, and examining these roots will tell reformers a great deal about what they are trying to do.

There are advantages and disadvantages associated with the "break-the-mold" rhetoric of AMERICA 2000. A major advantage, of course, is that telling people to break the mold encourages them to think beyond current structures of schooling. This is a necessary and laudable activity for anyone interested in exploring the relationship among teaching, learning, and school organization. The major disadvantage of the break-the-mold rhetoric is that it encourages reformers to act as if they were the only people who had ever thought of ways to reform schools. We have plenty of experience with such reforms and they are, for the most part, superficial, misguided, and (thankfully) short-lived. School reform, of the fundamental kind that deals with the conditions under which teachers teach and students learn, is part of a long historical conversation. Almost any idea that current reformers think is original will have been tried in some form in the past, and that past will have much to say about what to expect in the future. One of the first things I would do as part of a New American Schools development effort would be to commission a set of historical analyses of the key reform ideas that developers were interested in trying.

Focus on a Few Regularities of Schooling

Reforms that reach deeply into teaching and learning are complex, hard to develop, and even harder to implement. My advice to developers is much the same as the advice I routinely give to graduate students undertaking research projects—start with a topic that is deliberately much more specific than you think you can master, because it's going to become more complex as you work on it. I have suggested in another paper that all efforts to restructure schools deal essentially with four basic regularities of schooling. By "regularities," I mean basic problems that any effort at formal education must solve. The four regularities that form the basis for my work on restructuring are grouping students for purposes of instruction, defining teachers' work vis-à-vis groups of students, defining content and allocating it to time, and assessing students' progress. These are problems that can't be avoided. They admit to a broad range of solutions, depending on one's educational purpose and how widely one is willing to deviate from conventional practice. Most of the solutions that have been tried in the past are a matter of historical record and can be examined. Finally, different conceptions of knowledge, of teaching practice, and of student learning have very different implications for how one approaches solutions to the problems posed by the regularities of schooling.⁴

Whether one accepts my formulation of the regularities of schooling or not, it does seem essential that attempts to redesign schools should be anchored on some basic set of design problems. When industrial designers set out to design a new automobile or airplane, they don't ask themselves how they can create a radically new design. Instead, they typically start with a

⁴Richard Elmore, "Teaching, Learning, and Organization: School Restructuring and the Recurring Dilemmas of Reform," Invited Address, Annual Meeting of the American Educational Research Association, April 1991. See also Richard Elmore and Associates, Restructuring Schools: The Next Generation of Educational Reform. San Francisco: Jossey-Bass Publishers, 1990.

core set of design problems to be solved (fuel economy, distance, capacity, etc.) and begin to explore alternative solutions to these problems. Inevitably, these core design problems mushroom into a myriad of complex sub-problems, so it is important to get the initial design problems well specified, or you could find yourself solving a lot of sub-problems that have no relevance to a larger solution.

A major pitfall of most efforts to redesign schools is that they start by trying to reform "everything," without having a well-specified model of what everything includes. Not surprisingly, such efforts usually strangle on their own inclusiveness fairly quickly. Everything turns out to be a very large category. So if I were working on the design of a New American School, I would spend as much time as it took to identify no more than four or five central design problems, each of which could be stated in a simple sentence with no commas or semicolons. Then I would exercise as much creativity as possible in specifying these problems and developing alternative solutions.

Mobilize Knowledge in the Service of Action

My observations of schools in the process of restructuring have led me to the conclusion that one of the key constraints on the capacity of educators to act on their beliefs about what to do to improve teaching and learning is limited access to knowledge on several levels. This problem of knowledge has a structure somewhat like an onion—a series of concentric layers tightly related to each other.

Let me give an example. Suppose we want to design a school in which the problems generated by the regularities of schooling were consistent with a view of knowledge that said each student would master content in science, mathematics, writing, and social studies such that he or she would have the capacity to independently state a problem and solve it using a variety of sources of information. One layer of knowledge that goes with this task is basic cognitive research about what skills and behaviors constitute problem solving. But this research typically has little or nothing to say about how to design learning across subject matter areas with a consistent emphasis on a core set of understandings. So another layer of knowledge required is knowledge about curriculum design, which is often only distantly related to what teachers actually do with a curriculum in the classroom. So another layer of knowledge required is what teaching actually looks like when it manifests behavior associated with independent problem solving, but teaching behavior only imperfectly reflects what students actually learn. So another layer of knowledge required is knowledge about how students actually perceive and respond to attempts to influence their problem solving capacities. Each of these bodies of knowledge exists in some form, each is loosely related to the others, and none is in a form that readily translates into a set of solutions to the regularities of schooling.

Where efforts to change schooling around ambitious conceptions of teaching and learning typically fall apart is either in their failure to pursue actively the knowledge required to solve design problems or in their failure to push hard on the transition from knowledge to action. So, for example, many schools have an incipient vision of what they want to accomplish, but they lack the resources or are too intellectually lazy to pursue the knowledge relevant to the problem. Trusting the "wisdom of practice," they think they can make up whatever knowledge they lack by inspiration. Inspiration is good for a lot of things, but it doesn't substitute for hard, disciplined

inquiry. Some schools actively pursue knowledge, but it is not related to action in ways that teachers find useful. So, for example, teachers will attend a seminar on cognitive development that is unconnected to any set of designs they are expected to solve around the development of a math curriculum. Somehow the knowledge is expected to percolate through the organization and have an effect on teaching; usually it doesn't.

Even though they are in the business of purveying knowledge, most educators don't understand how to use knowledge individually or collectively to influence their own practice. This is not particularly surprising, because it is hard work. But making a coherent onion out of a bewildering welter of pieces of knowledge is at the center of redesigning schools.

THE NEED FOR SYSTEMIC SCHOOL-BASED SCHOOL REFORM

Sophie Sa, Executive Director
The Panasonic Foundation

Sophie Sa writes that it isn't enough to change a school; the system within which the school functions must also be changed. "What is puzzling is that many systems within which we found good schools do not offer much encouragement to those schools, do not seem interested in examining why those schools work, and do not use those schools as examples that others might learn from. Indeed, good schools often spend an extraordinary amount of effort fending off their systems...."

Sa describes the Panasonic Foundation's Partnership Program, which has worked with 9 school districts and three state departments of education to help bring about systemic reform. She highlights the difference between a traditional central district office and a restructured central office. The latter is organized for change rather than stability, aims at keeping everyone informed rather than keeping things running smoothly, focuses on incentives and outcomes rather than inputs, and allows school sites to identify budget, staff development, and technical assistance needs rather than prescribing these from the top down.

The AMERICA 2000 initiative proposes to create 535-plus "New American Schools" by 1996 and perhaps 1,000 such schools by the year 2000. It is a bold initiative designed to promote reform at the school site, and it is to be applauded. Certainly, the individual school must be the focus of reform. And certainly, reform must take place school by school: each school is different; each school serves children with different needs; and each school must develop its own vision, mission, culture, curriculum, and so on.

At the same time, the Research and Development groups for AMERICA 2000 must also meet the challenge of creating *school systems* that are supportive of schools that "break the mold." Like it or not, schools do not exist as independent entities, but within systems. And it is the system—both at the district and state level—that usually controls most of the educational resources needed by a school. It is the system's rules, regulations, appropriations, staff development procedures, and other such practices that determine to a very large extent what schools can and cannot do.

Some have argued that school systems should be abolished, but this is highly unlikely in the foreseeable future. Furthermore, a case can be made that some system is necessary, to ensure that the interests of the community at large (including, but not limited to, those of parents) are served, to set broad goals and policies, and to ensure adherence to federal and state laws, for

example. And a system, be it a district or a state, can be expedient. It can perform such functions as establishing and maintaining teacher qualification standards, minimal levels of student achievement, and the equitable distribution of resources. Good systems can also make it easier for schools to be good, hard for them to be mediocre, guarantee equality of access to all students, and, beyond that, set the goal for the best possible education for all.

THE GOOD SCHOOL

There are about 110,000 public elementary and secondary schools in this country, distributed among approximately 16,000 school districts. Many of these schools do not serve their students well. Or rather, they are places where some students may succeed, but the majority do not. In a relatively small number of schools, however, most students are succeeding. Some of these are public schools that work with a selected student body: New York City's specialized high schools come to mind, as do suburban schools whose students' parents are able to afford to live in "exclusive" neighborhoods. But there are also "ordinary" public schools that accept "ordinary" children, regardless of socioeconomic background, family circumstances, IQ, ethnicity, race, or gender, and do well by them.

What these successful schools have in common are:

- a belief that every child can learn;
- a clear and shared vision of what the school is about;
- high standards for everyone;
- an environment hospitable to and respectful of both adults and children;
- a curriculum that is integrated, challenging, engaging, and meaningful;
- a schedule and organization driven by the instructional needs of the students; and
- a professional staff that collaborates to make decisions about all aspects of the school within a culture that encourages, even demands, questioning and reflection, rather than the mindless acceptance of tradition, convention, and habit.

THE NEED FOR SYSTEMIC REFORM

We know, in short, what a good school looks like. And, without minimizing the extreme difficulties involved, we also are learning how to transform individual mediocre schools into good ones, as the efforts of TheodoreSizer, Henry Levin, and James Comer, as well as those of the Panasonic Foundation, demonstrate. What is puzzling is that many systems within which we find good schools do not offer much encouragement to those schools, do not seem interested in examining why those schools work, and do not use those schools as examples from which others might learn. Indeed, good schools often spend an extraordinary amount of effort "fending off"

their systems which, at the district level, might include school boards, central offices, teachers' unions, and administrators' associations.

As our schools are being charged with serving an increasingly diverse student population, the natural tendency of school systems to treat every school the same and to stress conformity to rules and procedures has inhibited school-level creativity and contributed to student failure. More often than not, it appears that good schools succeed *despite* their district and state systems, and not because of them. Although we know that many schools operate under constraints that are self-imposed—the "they won't let us" syndrome—and in fact have more freedom than they claim, it is a rare system that even attempts to disabuse the schools of these false perceptions. It is hard not to conclude that, insofar as school systems are concerned, (and this extends to state departments of education and legislatures) schools exist to serve administrative and bureaucratic convenience. Why else would uniformity be so valued? Why else would regularity be given such importance?

It is time for school systems to begin to transform themselves from bureaucracies that impede into organizations that actively nurture, support, and facilitate the development of good schools. They must begin to reallocate their resources, both human and financial, to the school level. They must decentralize decisionmaking, about issues that matter, to school-site personnel. Until they do, good schools will remain isolated phenomena, no matter how many there are, and children will be the losers.

THE PANASONIC EFFORT

The Panasonic Foundation has worked in 5- to 10-year partnerships with nine school districts and three state departments of education to help bring about systemic, school-based, whole-school reform.

Transforming Schools

At the individual school level, the Foundation has provided technical assistance designed to increase knowledge about best practice and to enhance the professionalism of teachers. Using teachers and administrators from around the country, as well as other experts, the Foundation provides schools in the Partnership districts with examples of exemplary practice that the schools may then adopt or adapt to their own needs.

Often the Foundation begins work with an individual school by asking the teachers and administrators in the school to define, or redefine, the school's educational vision and mission. From there, every aspect of the school—schedule, curriculum, instructional materials, student grouping, disciplinary practices, communications with parents, and so on—is scrutinized: is this congruent with our vision and mission; does this lead to better teaching and learning for all students; what do we need to know to make the school better?

Elementary schools in the Panasonic districts have received training on multi-age grading, mainstreaming of special education students with "regular" students, whole-language, developmentally appropriate curriculum, peer and cross-age tutoring, and increasing parental

involvement. As a result, several schools in Santa Fe, for example, have abandoned the use of textbooks and workbooks, eliminated pull-out programs for special education instruction, and are experimenting with combined grades (K-1, K-2, 2-3, etc.). Parents have been brought in as active decisionmakers about various school programs and, in many schools, parents have been trained and certified as substitutes, creating a stable pool from which the school can draw as needed. Many schools have developed new ways of assessing students and new forms of reporting that make it easier for parents to understand what their children know and do not know and what they need to improve.

Middle schools have received extensive technical assistance and training on appropriate organization and curriculum for early adolescents. Abandoning a traditional junior high school structure, many have now organized their students into smaller units ("clusters," "houses," "families") assigned to teams of teachers. They have developed a curriculum based on interdisciplinary thematic units, use flexible scheduling appropriate to instructional needs, and assess students through the use of projects, exhibitions, and portfolios.

High schools are developing cross-disciplinary curricula with a focus on material that is relevant to students. They are instituting "advisories" that enable teachers to know students as individuals and as whole persons. They are using cooperative learning, and heterogenous grouping to eliminate, or at least reduce, tracking. They have rescheduled the school day and the school week to accommodate students who need to hold part-time jobs, to give teachers common planning time, and to allow classes to run for two hours or a full day, depending on instructional needs.

Workshops have been held at all levels on building management and shared decisionmaking, school governance, appropriate assessment, forms of school organization, methods of teaching and learning, school-based budgeting, personnel selection procedures, and more. In addition to increasing school-site personnel's knowledge about how to improve schools, these activities have prepared school-site personnel to take on responsibilities formerly borne by districts and States, such as allocating budgets among and within schools; recruiting, interviewing, and selecting staff, including administrative personnel; defining student learning outcomes and developing indicators to assess student achievement; identifying staff development needs and, increasingly, conducting workshops on a wide variety of topics to other educators in their district. School-site personnel have been encouraged and emboldened to challenge "business-as-usual" at all levels, to play an active part in all decisions affecting their schools, to seek waivers from district and State regulations that, in their professional judgment, stand in the way of good teaching and learning—in short, to be professionals.

Transforming Systems

At the district and state level, the Foundation's efforts have mirrored the work with schools. Workshops have been conducted to help school systems reexamine their roles, rules, and regulations, and to ask:

- Does the way the system conducts business serve the needs of schools and students?

- Is the organization of the system appropriate to this task?
- Does the system relate to schools in ways that encourage teachers and others to design the best possible education program for their students?

The Foundation also has worked with districts to help them implement school-site budgeting, design real accountability systems, develop broad student learning outcomes, and generally shift resources and responsibility to the schools.

It is important to note that the districts and state departments of education with which the Foundation is in partnership have all sought out the relationship because they recognized the need for fundamental reform from the school level up. And the Foundation has declined to work in districts where important stake-holders—such as teachers' unions, administrators' associations, and school boards—disagreed with our basic philosophy. Nevertheless, the work with districts and State departments of education has been difficult, perhaps because at first there were very few examples of districts motivated to change—few examples, indeed, of well-functioning districts; or perhaps because the Foundation's agenda of empowering schools understandably led some people in central offices to think that they would lose power and quite possibly their jobs. In addition, school systems, particularly the larger ones, are extremely complex organizations, with many horizontal layers and vertical units that overlap and intersect, performing functions that are frequently ill defined. Now some examples are beginning to emerge of districts in which the district organization itself supports the multiplication of good schools and where the school system supports the general community interest in good education for all children. The following chart suggests how a restructuring central office might operate.

No Panasonic district has shifted completely into the restructuring mode, but each has moved to some degree. Several now routinely allow school-site personnel, including parents, to participate in the selection of teachers and administrators. Several have given schools control over portions of their budgets as well as the freedom to spend across categories (using funds previously restricted for textbook purchase to pay for classroom aides, for example). One district has dramatically reorganized to reduce layers of central administration so as to facilitate the coordinated provision of services to schools. Another district has reassigned people responsible for the administration of federally funded programs, such as Chapter I, and specialists in those programs from the central office to the schools. The special education division of a third district has initiated programs to encourage and assist schools to combine special education with general education. Rather than imposing centrally made decisions and centrally developed programs on schools, in other words, district offices are increasingly allowing, and helping to build the capacity of, schools to develop their own programs to address the particular needs of their students.

The Foundation's work with the three state department of education (SDE) Partnerships is relatively recent and has focused on helping them redefine their roles in the context of systemic school-based reform. Most SDE's expend an enormous amount of energy and resources on monitoring and regulatory activities, for example, but much of this activity places an onerous burden of time and paperwork on districts and schools and is not perceived to be very useful or even very relevant to the business of schools. The Foundation has brought district and school personnel to its workshops with SDE's so that the latter might have a better understanding of what schools and districts need from SDE's and thus might design better ways of serving those needs. One Partnership department has invited every educator in the state to challenge the department's own regulations, and to help it "break the mold" in the interest of better learning for children.

Function	Traditional Central Office	Restructuring Central Office
<u>Planning</u>	Organized for stability Districtwide ends and means Increased efficiency Focus on inputs	Organized for change District ends, school means Improved learning Focus on outcomes
<u>Technical Assistance</u>	Generalized for all schools Initiated from central office	Responsive to each school Initiated by schools
<u>Communications Strategy</u>	Chain of command Keep things running smoothly Minimize controversy	Network Keep everyone informed Advocate change
<u>Distribution of Resources</u>	Districtwide budgeting District allocates resources Categorical grants to schools	School-site budgeting Schools allocate resources Block grants to schools
<u>Interpretation of Policy</u>	Strict, few exceptions	Facilitate change
<u>Data Management</u>	Centralized and uniform	Decentralized and customized
<u>Accountability</u>	Input requirements Few incentives	Outcome expectations Clear incentives and benefits
<u>Research</u>	Central office prerogative	School-based
<u>Business Services</u>	Centralized Standard procedures	Decentralized Customer service orientation
<u>Personnel</u>	District hiring and transfers	School-based personnel decisions
<u>Staff Development</u>	Centralized planning and resources	School initiated and budgeted
<u>Contract Negotiations</u>	Focus on financial, legal, and administrative issues Contractual accountability in narrow areas	Incorporate educational goals Accountability following responsibility and authority for education
<u>Interagency Collaborations</u>	Bureaucratic and professional obstacles	Modeling new ways of working
<u>Curriculum</u>	Centrally written and promulgated	Developed at schools to achieve district goals
<u>Instruction</u>	Strategies centrally prescribed	School-based instructional decisions

PRELIMINARY RESULTS

The oldest of the Panasonic Foundation Partnerships, with the Santa Fe Public Schools, is in its fourth year. We cannot state with certainty that all, or even most, Santa Fe students are learning more or learning better, in great part because of the questionable validity of norm-referenced standardized test scores as indicators of meaningful learning. Reports from the district indicate, however, that in restructuring schools and within Panasonic-sponsored programs, students are earning higher grades, fewer students are being held back, student attendance is up, and student discipline problems are down.

Many parents are saying that, for the first time, their children like school. Parents are participating much more in school-level activities as well as in districtwide discussions, often appearing at school board meetings as advocates of programs that teachers designed.

Teachers say they have been revitalized and teacher turnover has decreased significantly. Students have testified that the interdisciplinary approach is helping them learn more and better understand their course work. In one high school, all mainstreamed special education students this year have passed the New Mexico writing proficiency test—a test that they as a group never took in the past because they were expected to fail. And whereas only 30 percent of the 1990 graduates enrolled in some form of higher education, 56 percent of the class of 1991 are expected to do so.

That teachers in every school in Santa Fe are actively engaged in some reform effort can only be attributed to the entire district's involvement, as a system, in reform. Although the proportion of restructuring schools in the other Panasonic districts is smaller, particularly in such larger districts as San Diego and Baton Rouge, the numbers are still impressive, ranging from a quarter to a third of the district.

There continues to be resistance to school reform at all levels in every Panasonic Partnership, from State department of education officials, to central office and school administrators, to teachers and parents. There is still the hope, as well as the fear, on the part of proponents of school-based reform, that "this too shall pass." But the length of the Partnerships and the ongoing commitment of key education leaders at every site is shoring up the confidence of the proponents and wearing down the resistance of those still in doubt. And as the successes of restructuring schools become increasingly evident, the momentum will accelerate.

School reform is something that happens at each school. But it is enormously facilitated when systems begin to see that school improvement is not simply the responsibility of individual schools but of the system as a whole. Only when that happens, and when systems become active nurturers of school-level efforts, will good schools become the rule rather than the exception. Systemic reform is a tactic, but it is far more than that. It has to do also with our goals for this country's future. For it is at the system level—the State systems and the systems of our 16,000 districts—that the public's interest is heard: equal access to the best quality education for every student.

LEARNING FROM ACCELERATED SCHOOLS

Henry M. Levin, Director
Center for Educational Research, Stanford University

The Accelerated Schools Program has demonstrated dramatic improvements in academic performance for disadvantaged students. Henry Levin writes that the underlying premise of the program is that "at-risk students must learn at a faster rate than more privileged students—not at a slower rate that drags them further and further behind." Levin cites three major changes that are necessary to institutionalize the program: active framework for change, placing school decisions and responsibility for their consequences at the school site, and using a gifted and talented instructional approach that builds on student and school strengths.

Levin cautions that the process of transforming a school cannot be done overnight. For accelerated schools, the transformation takes about 6 years. Important to ensuring a successful transformation are the following: devoting enough attention and time for capacity building and staff training and planning, using the strengths of the school (including parents), providing strong leadership, and taking a different approach to district support. Levin concludes the paper by disputing the notions that vast increases in funding are necessary to reform schools and that a specific curriculum or technology can serve as a "wonder drug" for schools.

INTRODUCTION

The Hollibrook Elementary School in Houston enrolls more than 1,000 students, many of them recently arrived immigrants from Central and South America. About 90 percent of the students are from families living below the poverty line. In 1988 the school's fifth graders were about 2 years behind grade level in reading and language arts and more than a year behind grade level in mathematics. By the spring of 1991, Hollibrook fifth graders were performing at grade level in all subjects and 1 year above grade level in mathematics.

The Daniel Webster School in San Francisco enrolls around 300 students drawn from some of the most impoverished areas of that city and about equally split among blacks, Latinos, and Asians. In 1989-90 this school had the largest percentage gains in test scores in language and the second largest gains in mathematics among the 72 elementary schools in San Francisco. For 1990-91, the Daniel Webster School experienced gains of 10 percentile points in language and reading and 19 percentile points in mathematics on CTBS, again placing at the top in that city. Performance was above grade level for all grades in mathematics and approaching grade level in the two other areas.

Fairbanks Elementary School in Springfield, MO, has about 200 students, most of them from rural white, low-income families. In 1989-90 their students made impressive gains in all subjects and two-fifths of the so-called "remedial students" had improved their achievement to the extent that they were no longer eligible to receive remedial funding.

Although these three schools are in different parts of the country and have strikingly different student populations, they have three things in common. First, their enrollments consist predominantly of students from poverty backgrounds who are at risk for educational failure. Second, although they were formerly among the bottom schools in their districts in terms of student progress, all have had dramatic success in increasing student achievement and parent participation within existing resources. Third, all have committed themselves to an unusual program that replaces remediation with academic enrichment and acceleration.

Daniel Webster, Hollibrook, and Fairbanks are just three of more than 50 schools in 1990-91 that have adopted the approach of the Accelerated Schools Project, established at Stanford University in 1986 after an exhaustive 5-year study on the status of at-risk students in the United States. Our study defined at-risk students as those youngsters who are unlikely to succeed in schools as currently constituted. Such students are heavily concentrated among minority groups, immigrants, non-English-speaking families, single-parent families, and poverty populations. Recent estimates suggest that, nationally, about 30 percent of students in primary and secondary schools are educationally at risk and that this proportion will continue to rise sharply in the future with immigration and the increased incidence of children in poverty (Levin 1986; Pallas, Natriello, and McDill 1989). In many of the major cities of the United States, the majority of students are educationally at risk.

At-risk students enter school behind other children academically, and they get farther and farther behind the longer they are in school. Over half fail to complete high school, and those who do are performing academically at the eighth grade level. These education deficiencies translate into poor life chances with respect to employment and income as well as political and social participation in American society.

The Stanford study found that the inability of existing schools to advance the education of at-risk students is hardly an accident. Most schools that enroll such children embrace organizational, curricular, and instructional strategies that contribute to reduced expectations and stigmatization of at-risk students, uninspiring school experiences, and a devaluing of the rich talents of teachers and parents. In the absence of change, students will be systematically subjected to an experience that will assure glacial progress and high failure rates.

Accelerated schools were designed by the Stanford project to have exactly the opposite consequences by bringing at-risk students into the educational mainstream by the end of elementary school. Our premise was basic: At-risk students must learn at a faster rate than more privileged students—not at a slower rate that drags them farther and farther behind. An enrichment strategy is called for rather than a remedial one.

It may seem strange to talk of acceleration for at-risk students. Educators usually reserve acceleration programs for their "gifted and talented" students, those who perform at the very top. One can't help wondering why we channel so much enrichment to help our best students get even

better while we deliberately slow the pace of learning of children who lack educational advantages.

Acceleration works just as well for at-risk students. One recent study assigned at-risk students at random to remedial, average, and honors classes in seventh grade mathematics. At the end of the year, the at-risk students in the honors class—which provided pre-algebra instruction—outshone those in the other two groups (Peterson 1989).

INSTITUTIONALIZING CHANGE

But moving from an idea to institutional change is never an easy process. In order to develop a strategy for creating accelerated institutions, we found that we would have to make three major changes in U.S. schools, changes that were in deep conflict with current practices (Levin 1988).

1. Unity of Purpose

Most schools that educate at-risk students seem to lack any central purpose. Rather, they are a composite of individuals and programs that seem largely disparate and piecemeal, with no central vision. Planning, implementation, and evaluation are typically done independently and by different groups. Teachers tend to see their responsibilities extending no farther than good practices in self-contained classrooms, while remedial specialists work in isolation from each other and the regular school program.

Acceleration requires the establishment and pursuit of a common vision that serves as a focal point for the efforts of parents, teachers, staff, and students. The vision of an Accelerated School must focus on bringing children into the mainstream, where they can more fully benefit from school experiences and opportunities. The development of this vision requires the combined efforts and commitment of all parties involved. "Unity of purpose" refers to both a vision or dream of what the school can be and an action plan that will get the school there.

2. School-site Empowerment

Existing schools for at-risk students are largely dominated by decisions made by entities far removed from the school site and classroom. Federal and state governments and central offices of school districts have established a compendium of rules, regulations, directives, policies, laws, guidelines, reporting requirements, and approved instructional materials that serve to stifle educational decisions and initiative at local school sites. It is little wonder that administrators, teachers, parents, and students tend to blame factors beyond their control for the poor educational outcomes of at-risk students. And compliance with these policies ensures failure, not success, as the historical record has shown.

An accelerated school takes responsibility for the major decisions that will determine educational outcomes by establishing a collective sense of efficacy and the skills and organization to undertake the necessary changes. If the school is to achieve its vision of educational success, administrators, teachers, other staff, parents, and students must participate in making informed decisions regarding school activities. Important areas of school-site decisions include some or all

of the following: curriculum, instructional strategies, instructional materials, personnel, and allocation of resources inside the school. Such decisionmaking requires active support from the district's central office in the form of information, technical assistance, staff development, and evaluation, as well as an overall system of accountability.

3. Building on Strengths

Schools with large numbers of at-risk students tend to highlight the weaknesses of their students, staff, funding, and administrative support as an explanation for poor performance. A particularly heavy emphasis is placed on the litany of what is wrong with at-risk students and their parents. But, rather than dwelling on weaknesses, good pedagogy begins with the strengths and experiences of participants and builds on those strengths to overcome areas of weakness.

Accelerated schools seek out the strengths of their students and other participants and use those strengths as the foundation on which to build their programs. Students are treated as gifted and talented individuals, and strengths are identified that are then used as a basis for providing enrichment and acceleration. The strengths of at-risk students are often overlooked because they are not as obvious as those of middle-class students. But our research has shown that at-risk children bring assets that can be used to accelerate the learning process. These include interest and curiosity in oral and artistic expression, ability to learn through manipulation of appropriate learning materials and interesting applications, the capability to delve eagerly into intrinsically interesting tasks, and a capacity for learning to write before mastering reading skills.

But the process of building on strengths is not limited to students. Accelerated schools also build on the strengths of parents, teachers, and other school staff. Parents and teachers are largely underutilized resources in most schools. Parents, because they want their children to succeed, can be powerful allies if they are placed in productive roles and provided with the skills to work with their children. Teachers bring gifts of insight, intuition, and organizational acumen to the instructional process, gifts that are often untapped by the mechanical curricula that are so typical of remedial programs. Accelerated schools acknowledge the gifts of teachers and parents and build on those strengths in fulfilling their accelerated visions.

Combining the Principles

An accelerated school is not just a conventional school with new principles or special programs grafted onto it. It is a dynamic environment in which the entire school and its operations are transformed. The emphasis is on the school as a whole, rather than on a particular grade, curriculum, staff development approach, or other limited strategy. The goal is high academic achievement for all students.

The three principles of unity of purpose, site-based empowerment, and building on strengths are woven together in virtually all of the activities of the accelerated school. The school is governed by its staff, students, and parents, and priorities are pursued by task groups that follow a systematic inquiry process for problem solving, implementation, and evaluation.

Accelerated schools use a heavily language-based approach across all subjects, even mathematics, with an early introduction to writing and reading for meaning. The curricula reflect

a sense of high expectations and a tie to the students' cultures. Active learning experiences are provided through independent projects, problem solving, and applying learning to concrete situations. By applying academic concepts and skills to real-life problems and events, students see the usefulness of what they are learning.

The organization of accelerated schools allows for a broad range of participants and a collaborative approach in which students' families play a central role. Indeed, success depends on parents working with staff and students, helping to chart the course by participating in the decisionmaking bodies of the school.

LESSONS LEARNED

It takes about 6 years to fully transform a conventional school to accelerated status. This transformation is accomplished largely within existing budgetary resources, so we do not set any major change in resource requirements to initiate the process. Over the long run, however, we believe that some of the specific needs of at-risk students can only be met through greater investments in both their schools and their home situations. Of our 54 existing accelerated schools (increasing to more than 100 in 1991-92), only two are as old as 4 years. However, even those schools with only 2 or 3 years of experience have shown extraordinary gains in student achievement, student and teacher attendance, parental involvement, and the establishment of inviting and stimulating school programs.

As we have assessed our growing movement, we have learned a number of lessons that we are using to improve the implementation of the accelerated school model. These include the necessity of devoting considerable attention to capacity building, the need for more staff time, particular leadership issues, the challenges of underutilized talent in the schools, the potential of parents, and the need for a new approach to district support of individual schools.

Capacity Building

The mere designation of a school as accelerated does not create such an entity. The school must acquire the capacity to establish a unity of purpose, make responsible decisions, and build on the strengths of students, staff, parents, and community (Levin 1991). We are addressing a major shift in the collective culture of the school, one that embraces all of the participants, including all staff, students, and parents. Certainly, school staff have neither been trained to function in this way nor have their schools reinforced these patterns of behavior. Much of the transformation to an accelerated school comes directly from learning by doing. As school staff and community work at it, they become experts at the process. But in order to get the process started, they must take a number of steps.

It is usually necessary to provide some training in making decisions in groups. Rarely have principals, teachers, and school staff had this experience. Traditional school meetings tend to be highly structured and run in a routine and often authoritarian fashion. Teachers, in particular, often consider meetings a waste of time. School staff rarely view meetings as having the potential to be productive and to accomplish major school goals. Accordingly, school staff need experience in working together, with special attention to group process and participation,

acquiring and sharing information, and working toward decisions. In addition, they need exposure to inquiry-oriented processes that help to identify and define challenges, to look for alternative solutions, and to implement those solutions.

These needs can be met through special training in the appropriate areas. But involvement in the accelerated school process itself is an important part of building capacity. In order to initiate such a process, we have designed a staff development approach for getting started. This four-phase process is carried out over several staff development days. It begins with the gathering of extensive baseline information about the school—including its history, community, students, strengths, and challenges—for discussion on the first day. After extensive discussions of this information among staff, the "vision" stage begins.

In a series of meetings involving the school as a whole and smaller components of staff, the participants focus on building a vision of a school that will work for students, staff, and community and that can be created in the 6-year transition period. This vision will be the focus of accelerated school implementation. The vision process can be carried out on the second day, if staff members prepare for it by discussing dreams and possibilities on an informal basis in the days preceding this meeting.

The third phase involves the comparison of the vision with the baseline report. Clearly, there will be a large gap in almost every aspect between the vision and the existing situation. School staff are asked to list everything that must be done to move from the present situation to the vision. Of course, they amass a very large number of changes that must be made, often 40 to 50 major alterations.

The fourth step takes the list of what needs to be accomplished and reduces it to a small number of initial priorities that will become the immediate focus of the school. No organization can work effectively on more than three or four major priorities at a time. The task facing the staff is to select those three or four priorities. This exercise can generate a very animated set of discussions that get to the heart of staff concerns. The dynamics of the discourse are themselves useful because they engage the staff in realizing that they are responsible for change and in choosing where to begin. The agreement on priorities is followed by the establishment of the first task committees—the small groups that will work on these priorities—and assignment of staff to each group, usually through self-selection as well as the establishment of a coordinating or steering committee for the school.

Our experience over 4 years suggests that how the changes are made is at least as important as what is done. Schools tend to treat steps to reform as a mechanical checklist that can be carried out in lockstep fashion, after which there will be magic results. When the results are not forthcoming, the reform is blamed as being inadequate and the search begins for a new magic formula. At the heart of the accelerated school is a focus on the participants as the reform package and the process by which they formulate their needs, goals, and priorities as well as the process by which they define and solve problems and implement and assess solutions. It is the transformation of the school from a community that is dominated by mechanical practices imported from outside "expertise" to one in which responsibility, expertise, and efficacy are internal to the school. We have found that the process of getting there requires leadership, inspiration, hard work, and sufficient time to model and practice what is learned, rather than a mechanical tour through a checklist of staff development activities.

Time Needs

For a school staff to work together to define challenges and search for and implement solutions, they need time outside of the ubiquitous teaching demands for group inquiry and discussion, research, reflection, and other forms of professional development. In contrast with secondary schools, where teachers may have two out of seven periods for "prep" time (meetings, planning, preparation, and so on), elementary school schedules do not provide such luxuries (necessities?). Other than about an hour a week for faculty meetings and occasional periods for staff development, there is no time provision for working together on the accelerated school process. The lack of teacher prep time is as great a bottleneck as the underfunding of schools attended by at-risk students (Levin 1989).

We have taken the following steps to maximize the amount of time available for focusing on the school agenda. Because the accelerated school process is a whole-school effort, all faculty meetings and staff development days are devoted to the accelerated process. Previously established committees, if needed, are folded into accelerated school activities. Attempts are made to secure additional time by scheduling particular activities that can be partially or fully staffed by the visiting school district teams in the arts, sciences, and physical education. Small grants have been obtained from foundations to pay for substitutes and for meetings outside of regular school hours. Some schools have been able to rearrange their schedules to obtain a "minimum" day every week in which an afternoon can be devoted to accelerated school work groups. Although these solutions are helpful, they are piecemeal. We believe that school systems need to recognize that elementary school staff require prep time just as do secondary school staff, if site-based decisionmaking and responsibility are to be effective.

Leadership Needs

In the traditional school, the role of the principal is primarily one of policy enforcement of the rules, regulations, mandates, procedures, and deadlines that are visited on the school. The demands on the principal to fulfill the myriad requirements of policy compliance leave little time or energy for instructional leadership. In contrast, the principal in an accelerated school has a different role. He or she is responsible for coordinating and facilitating the activities of decisionmaking bodies as well as for obtaining the logistical support necessary in such areas as information, staff development, assessment, implementation, and instructional resources.

A good principal in the context of the accelerated school is one who is an active listener and participant, who can identify and cultivate talents among staff, who can keep the school focused on its mission, who can work effectively with parents and community, who is dedicated to the students and their success, who can motivate the various actors, and who can marshal the necessary resources. The principal must also have keen analytic and planning skills to productively coordinate the many on-going activities and initiatives of the school without creating staff burn-out. The principal must inspire staff, students, and parents and serve as a role model for the inquiry process and the values embodied in accelerated schools. Finally, the principal is the "keeper of the dream," helping staff to overcome temporary disappointments or setbacks. Principals must make the transition from control and policy enforcement to inspiration, facilitation, coordination, and acceleration. Not all will be able to make the transition, and selection and training of future accelerated school leaders must be promoted through both

intensive staff development and through the transformation of traditional administrator training to programs based on accelerated principles.

School Talent

One of the most rewarding findings with the pilot schools was the amount of talent embodied in school staff. As teachers and other staff members begin to embrace a problem-solving mode where their ideas count, they spawn a large number of creative ideas for accelerating student progress. As they work together around a common vision and priorities, they strengthen their own capacities through coaching, sharing, and discourse. To a large extent, we believe that teachers in existing schools are being underutilized and that there is far more talent in the schools than is widely recognized. The accelerated school process seems to unleash that talent so that ideas count in ways that they have not in more traditional staff roles. Further, through the practice of staff supporting each other and sharing insights, the entire school benefits from the enormous capabilities that are normally hidden in classrooms or repressed by drill and practice and teacher-proof curricula. We will continue to find new ways of helping schools build on the talents of teachers and other staff.

Parent Potential

A second pleasant surprise has been the enormous potential to harness parental support and involvement in the accelerated schools. Both of our pilot schools have built their programs of parental involvement on two simple assumptions: that parents love their children and that they want them to succeed educationally. We have found that if the schools can connect these two motives to a set of manageable parental activities and responsibilities, parents will become involved in both the education of their offspring and in the school. Particular approaches include assistance to parents in helping their children succeed, through classes, parent meetings, and individual counseling. Equally important is creating an atmosphere in which parents always feel welcome through the establishment of a reception center, cordial attitudes on the part of school staff, and parent programs that are developed and implemented by parents with assistance and support from the school.

The results of these efforts are widespread participation of parents in both the school and in home activities on behalf of their children. Our pilot schools have obtained representation of over 90 percent of the parents at major school functions and close to 100 percent at parent-teacher conferences. Parent volunteers provide regular assistance in classrooms and at school events. Parents attend sessions on assisting their children educationally and applying what they learn at home.

School District Support

Finally, we have learned that accelerated schools must obtain school district support for their activities in the form of technical assistance, staff development, and evaluation as well as bottom-line performance expectations rather than compliance requirements (Levin 1991). Accelerated schools will function best if school districts work with individual schools to set targets

for improvement as well as accountability systems to monitor that improvement. Once there is agreement on goals, school districts should waive all superfluous procedural requirements. In their place, central office personnel should help schools reach their goals.

For example, if there is a concern with student performance in a particular subject, the curriculum and evaluation divisions of the central office should assign personnel to work with the school-level task force to evaluate student performance, define the problems, provide information on alternative solutions, and assist in implementation. Such assistance is also needed to place staff development within such a problem-solving context. In principle, all central office personnel should devote at least half of their time to helping individual schools reach their goals. Schools should be evaluated only on progress toward meeting their goals, and central office staff should be periodically evaluated by schools on their effectiveness in assisting schools. This would turn the evaluation process around. Even school board members should see their main role as creating the conditions under which accelerated schools can succeed in reaching their performance goals.

Two Myths

We have learned that there are two powerful myths about school reform. First is the widespread view that the only way to drastically improve schools for at-risk students is with vast increases in funding. Although the case for increased school funding is a powerful one on the basis of benefit-cost studies (Levin 1989), it cannot be used as an excuse to waste present resources. To be sure, there are enormous unmet needs among at-risk student populations and their families, but only a portion of the students' educational needs can be met with additional resources. We believe that using existing resources better is a far more effective strategy for creating educational breakthroughs for at-risk students than simply adding resources to conventional schools. Both strategies will be needed for a long-run solution to bringing at-risk students into the educational mainstream, but school transformation must come first. Indeed, a strong political strategy for obtaining additional resources to get the full job done is to show that existing resources are being used wisely to create productive student outcomes.

We have found that the transformation to an accelerated school can be made primarily by reallocating existing resources to free up time and make other provisions for staff development and accelerated school activities. To our knowledge, none of our schools has obtained additional funding that exceeds even 1 percent of its budget to pursue accelerated school activities. We believe that the basic transformation to and operation of an accelerated school can be done within existing resources.

A second myth is that there are curriculum packages, educational technologies, or stylized teaching practices that, if adopted, make the difference between school failure and success. In our experience, the ability to energize a school and get it to focus productively on a common set of objectives, using the talents of staff, parents, and students, is far more important than any particular curriculum package or teaching method. A school that functions in this way discovers and develops the methods and content that contribute to bottom-line success in a way that integrates curriculum, instructional strategies, and school organization. In contrast, the endless quest for piecemeal reforms such as new curriculum packages, educational technologies, and teaching methods in the absence of more far-reaching reforms is likely to be fruitless and expensive (Cuban 1984).

FUTURE OF ACCELERATED SCHOOLS

The establishment of accelerated schools for at-risk students has gotten off to a productive start with considerable support and encouragement from the broader education community. We have tried to use the lessons that we have learned over the first years to improve the process of initiating and supporting accelerated schools, to develop an effective training program, to work more closely with school districts, to help schools find ways of obtaining more planning time, and to build on the enormous talents of school staffs and parents. These lessons have also sparked three new initiatives.

We have found that the possibilities for an expanded accelerated school movement will require a national network of centers to collaborate with schools in their own geographical areas. The movement will necessarily be limited if it is connected only to a single center at Stanford. We have established the first four of a larger number of university-based satellite centers in San Francisco, Los Angeles, Houston, and New Orleans. Each satellite center has been initiated at a local university that is an important source for training administrators and teachers.

The satellite centers are expected to play major leadership and training roles in their areas in both research and training for accelerated schools as well as to provide technical assistance to such schools. These centers have established pilot accelerated schools that are a basis for providing hands-on experiences for their staffs as well as for placing student teaching and administrative interns. It is hoped that such schools will provide a laboratory for transforming both teacher and administrative training and will create local models of accelerated school success that can be replicated.

Second, we have recognized that we need to set national training standards that must be met by the staffs of satellite centers and accelerated schools. Accordingly, we have established a 1-week training workshop to provide the knowledge and some of the skills required for establishing accelerated schools. This workshop emphasizes an understanding of accelerated practices that will be implemented at school sites. The practices should be adopted immediately by the school to reinforce what has been learned. We are attempting to ensure that trained facilitators are available to all schools, to provide followup and guidance at the school site. During the summer of 1991 we convened seven of these workshops, several of which were presented collaboratively with satellite centers. This training provided a basis for doubling the number of accelerated schools to more than 100 by fall of 1991 as well as providing a context for preparing new trainers and utilizing principals and teachers from our present accelerated schools as summer trainers.

Third, we have begun to realize that sending children who have experienced accelerated elementary education to traditional middle schools or junior high schools can undo earlier successes. Traditional middle schools have low expectations for at-risk students and do not build on the gains of accelerated students. Accordingly, we have begun to establish middle schools that are based on the same principles as our elementary schools. We have worked with a pilot middle school for 1 year, and will establish two more in 1991-92. It is our hope that accelerated practices can be as effective in middle schools as in elementary schools and that, ultimately, high schools will adopt the same practices so that at-risk students and all students can experience an articulate education that is fully accelerated.

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KEY LESSONS FROM THE SCHOOL CHANGE PROCESS IN PRINCE GEORGE'S COUNTY (MD)

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Michael Grady and John Murphy argue that, while the special needs of at-risk students are critical, education reform efforts would achieve the greatest gain by focusing on fixing school systems in danger of failing students. Grady and Murphy contend that "local autonomy is a basic precept for guiding the change process" within a school system.

The authors describe the process of school renewal in Prince George's County (MD), a school system plagued with falling test scores, a rapidly increasing concentration of economically disadvantaged students, racial tensions, and severe discipline problems (roughly 20 percent of students were suspended in 1985). The district's renewal plan included combining school-based leadership teams, decentralizing authority structures, and increasing accountability measures throughout the system. As the leadership teams became the primary decisionmaking unit in the schools, the role of principals shifted to that of facilitating the change process.

A SCHOOL SYSTEM AT RISK

Much of the current debate on educational reform is properly centered on the special needs of at-risk students. Typically, these are students who begin struggling in the traditional school setting during childhood or early adolescence. By high school, these youngsters are often at peril of leaving school without diplomas and woefully unprepared to participate in the American work force. Students at risk of failing in school are often poor, minority, and residents of one of the nation's central cities.

The individual circumstances of the at-risk student are both compelling and worthy of a serious policy response. However, it is the premise of this paper that the energies of the educational reform effort would be better invested in trying to fix school systems that are at risk of failing students, especially those youngsters who stand to gain the most from a successful school experience. Without substantive changes in how schools organize to serve students at risk, there is little hope that these children and youth will be prepared to enter the 21st century as productive, thoughtful, and contributing citizens.

By the mid-1980's, the Prince George's County Public Schools had joined the ranks of school systems at risk. Evidence mounted that the school administration and individual schools were failing to provide useful educational experiences for students in greatest need. Performance of students on nationally normed standardized tests had declined steadily, and the gap between black and white students was substantial. In 1985, approximately one in five high school students was suspended; black males constituted a majority of this total. Many high school students were enrolled in low-level courses; far too many students were graduating from Prince George's high schools without completing substantive courses in mathematics, science, English, social studies, and a foreign language. In cases where students were enrolled in challenging courses, too many teachers relied on torpid and mechanical instructional practices that quashed whatever initial excitement students might have brought to the classroom. Finally, there was community unrest over a decade-long struggle over how to effectively desegregate the school system. Attendance trends manifested this discontent, as a decreasing percentage of school-age children attended public schools in the county.

The composition of the public school enrollment in Prince George's County changed fundamentally between 1970 and 1985. During this period, minority student enrollment increased from approximately one in five to three in five. Schools also were serving a higher concentration of economically disadvantaged families, as evidenced by a near doubling in the percentage of elementary students enrolled in the Federal lunch program. The plain fact was that the schools and the school system had failed to keep pace with the demographic transformation at the local population. Students were arriving at school with a wider range and higher intensity of needs, and the schools stood still, satisfied to teach a student population of yesteryear.

In the spring of 1984, the Prince George's Board of Education hired a new superintendent of schools. The new administration set a goal of energizing an organization that had grown content with mediocrity and had been lulled into accepting its status as a second-class public school system. Teachers and administrators were overwhelmed by the growing needs of the student population, and many fell into the trap of attributing poor student performance to the social circumstances of the youngsters who attended their schools. The new superintendent recognized the need for swift, fundamental change to reverse trends in organizational morale and school performance. With gains in these areas, the system would begin the process of winning back the confidence of parents and the community.

What follows is a brief history of the process of school renewal in Prince George's County. Readers should observe one important caveat: This paper is a description of a series of choices made by one school system based on a unique set of local needs. This description is not meant as a prescription or template for school change. As a matter of fact, a basic precept that guided the change process in Prince George's County was local autonomy. The elements of change described below seemed to be the right choices, given the combination of local sociopolitical circumstances and the obvious need for comprehensive reform of the school system. School districts that face similar challenges are invited to use the Prince George's experience as an example of the choices made by one system in light of local conditions.

The premise that guides much of the following discussion is that improvements in student performance will flow from the efforts of school systems to create the conditions in which teachers and administrators are free to make sound educational decisions. Local schools can develop effective, population-specific educational programs only if the central school

administration is willing to remove needless administrative constraints that stifle the creative energies of professionals working in schools.

The first four sections of the paper are devoted to discussions of the key lessons of the Prince George's experience: improving school-based capacities, establishing system wide accountability, using information strategically, and defining an enhanced role for the school principal. In summary, the final section of the paper discusses the initial goals of the change process, the methods used to reach consensus, major obstacles to effecting change, staff training, mechanisms for feedback, ways of measuring progress, the timeframe for change, and the cost of the effort.

LESSON 1: A MASTER PLAN TO IMPROVE THE CAPACITY OF SCHOOLS TO PLAN AND TO SOLVE PROBLEMS

Shortly after the new superintendent arrived in 1984, the administration initiated the development of a long-range strategy for school change. In its first year, the new administration devoted itself to composing a master plan for change grounded in the Effective Schools research. Developed in consultation with Lawrence Lezotte, a school improvement specialist from the University of Michigan, the Prince George's plan called for the formation of local school-based leadership teams that would be ultimately responsible for setting school improvement goals. All 172 schools would proceed at roughly the same pace in the development process.

During the first year of plan implementation, 1985-86, principals participated in an executive leadership development program. These sessions were held quarterly and provided the principals with baseline training in the skills that would facilitate effective deliberations of their school teams. The culminating activity of the leadership development program called on principals to write plans for introducing their school staffs to the Effective Schools Process.

The initial years of school-based improvement were devoted to developing the talents of school decisionmaking teams. These groups were typically made up of teachers, support staff, administrators and, in some cases, parents. Between 1986 and 1988, school teams conducted local needs assessments, wrote improvement plans, implemented the plans, and conducted self-evaluations of the implementation process. By the end of the first year of planning, some schools discovered that a loose fit existed between their improvement goals and the strategies identified to reach those goals. In cases where the goal-strategy fit was not appropriate, schools modified their approaches in consultation with their respective area office, which served as a technical assistance center during the improvement process. The area offices also helped the schools conduct formative evaluations of the improvement process.

Subsequent years of school improvement in Prince George's County have been characterized by several developments. First, about 60 schools have begun the process of school-based budgeting. The purpose of this effort is to bring the resource deployment process closer to the cost center, that is, the local school. Moreover, school-based budgeting allows schools to align the use of resources with their school improvement goals.

The second feature of more recent school improvement activity involves the schools' movement away from single-year planning in favor of a long-range orientation. Many schools now approach the process of school improvement within a 3- to 5-year planning frame, providing for reasonable checkpoints along the way. In addition, some schools have gone well beyond the more conservative limits of the improvement process to introduce a number of second-generation reforms. Several of these initiatives have involved the redesign of the basic structures of school organization and the instructional program. One example of this is the Ninth Grade Project at Northwestern High School. Northwestern's school leadership team has "front-loaded" its discretionary resources to provide additional support for its entering class of ninth graders. Reconfiguring staffing at the school, modifying the schedule, eliminating low-level courses, revising the curriculum, and concentrating student support services at the ninth grade level are the principal features of the Northwestern program.

On a practical administrative level, the 5 years of school improvement have resulted in the transfer of authority and staff from the central administrative office to schools and area offices. Currently, Prince George's County has the lowest central administrator-to-student-ratio in the Washington metropolitan area and among the lowest in Maryland.

LESSON 2: SYSTEMWIDE ACCOUNTABILITY

The accent on accountability was first set in 1984 when the new superintendent directed the Board of Education to fire him if within 5 years he failed to bring the system into the top quartile of student achievement in the nation. Since then, county schools have made steady progress in terms of students' overall performance on standardized achievement tests. Between 1984 and 1990, the scores of third graders increased from the 58th to the 75th percentile; of fifth graders, from the 58th to the 71st percentile; and eighth graders' scores rose from the 56th to the 67th percentile. Achievement gaps between black and white students decreased from 25 to 16 points in third grade, 25 to 20 points in fifth grade, and 24 to 20 points in eighth grade during this period.

As the authority to make meaningful decisions was transferred from the Board office to local schools, teachers and principals more willingly accepted responsibility for their students' educational outcomes. In Prince George's County, accountability priorities are set by the superintendent in consultation with the six area offices. Each school then converts these priorities into operational goals and objectives for its own improvement. These priorities embrace an array of school performance indicators including academic achievement, student discipline, advanced course enrollment, advanced course performance, reduction in number of low-level courses, dropout rates, and college enrollment rates.

In addition to the standard assessment of school-level performance, the principle of accountability is infused throughout all levels of the school organization. Area administrative offices set "service goals" for both the volume and quality of support they provide their assigned schools. Periodic audits of the system's four major divisions—Instruction, Personnel, Support Services, and Pupil Services—ensure that all levels of the organization are held accountable for high performance.

LESSON 3: STRATEGIC USE OF INFORMATION

Between 1984 and 1991, the school change process in Prince George's County has been furthered by the strategic use of information, both to leverage local political pressure for positive change and to improve the integrity of the organization. (In this paper we do not directly address a central activity in the use of information by school staff, namely, the interpretation of instructional data by teachers.¹

One use of information in Prince George's County involved the strategic release of data for the purpose of galvanizing community support for change. An example of how information was used to prompt a community response was the system's attempt to address the chronic academic and social problems of black male students. An internal school system analysis of student performance data revealed that black males in Prince George's County trailed far behind their classmates in academic achievement, advanced course enrollment, graduation, and college enrollment rates. On negative indicators, black males outnumbered white students and black females in such categories as suspensions, dropouts, and special education placements.

To elicit a response from the community and, eventually, support for positive action, the superintendent released for public scrutiny the deplorable academic profile of black males, a group which at the time made up approximately one-third of school enrollment. The statistic that caused the most stunning reaction was the cumulative grade point average of black males in Prince George's County: 1.89 (on a 4.0-point scale). Although the initial reaction to this data was one of anger and some despair, the community eventually came together under a committee of key leaders of business, clergy, higher education, and government, the majority of whom were themselves successful black males. The committee issued its report and immediately parlayed broad-based community support into annual grants of \$2 million from the county government and a pledge from the county executive to seek an eventual \$150 million increase in the Board of Education's operating budget.

Information is also useful to guide decisions pertaining to the functions and structure of the organization. Two examples—one from early in the school change process, the second more recent—illustrate how information can reveal defects in how the system is organized, which may in the long term impede systematic change.

The first example concerned the function of the area administrative offices. Prince George's County Public Schools are organized in six administrative areas of approximately 30 schools each. Each area is headed by an area assistant superintendent who has a staff of four teacher specialists. Before the system's launching of the school improvement process 6 years ago, the role of the area office was for the most part limited to teacher and principal evaluations and

¹The school system has spent the past 6 years developing a comprehensive criterion-referenced testing (CRT) program. This local assessment program consists of a series of content-specific tests at each grade. Unlike a national norm-referenced test, CRT items are anchored to the Board-approved curriculum objectives, thereby enabling teachers to assess the proficiency level of individual students in each subject area. The principal purpose of the CRT is to provide teachers with formative data on which to base important instructional decisions that affect their classroom programs.

basic administration. Since that time, the area offices have been converted to technical assistance centers. These units now support teachers and principals during various stages of the school change process, while serving as conduits of important systemwide initiatives and policy changes.

For a second example of how information has been used to foster a more effective organization, we revisit the black male achievement experience introduced above. One discovery made by the committee in its review of the school system was that no central authority existed in the system that had exclusive responsibility for overseeing the schools' educational equity efforts; consequently, the impact of a decision on equity goals was not always carefully considered during policy debates. Pursuant to the recommendations of the Black Male Achievement Committee, Prince George's County Public Schools created the Office of Equity Assurance, which now serves as an ombudsman office, ensuring that implications for educational equity are foremost in the minds of those charged with important decisions about policy and practice.

LESSON 4: ELEVATING THE STATUS OF THE SCHOOL PRINCIPAL

During the 6-year school change process, school principals in Prince George's County became major players in both schoolwide and districtwide decisionmaking. Within the school setting, principals became the facilitators of school change and decisionmaking, a departure from more traditional roles as final arbiters. This change in role was occasioned by the emergence of the school team as the primary decisionmaking unit in the school. It is the team that formulates school improvement goals, decides on strategies for reaching those goals, and targets resources. The principals were asked to help create the conditions the team members need to think creatively, take risks, and develop trust in each other to make decisions in the best interest of students.

The enhanced status of the principal has been felt well beyond the schoolhouse door. Four principals (two elementary, one middle, one high school) currently serve on the Superintendent's Executive Council, which meets bimonthly for strategy sessions. The superintendent also speaks at the monthly meetings of the elementary, middle, and high school principals. The central message in this new focus on the principals is that the school system is now aligned so that local schools are the centers of authority; consequently, effective principals are those who are most skillful at accessing the talents and backgrounds of their school staff and parents.

The experience of one elementary school and its principal illustrates how a thoughtful school leader can inspire a school staff and the local community to create a setting which is conducive to learning for all students. Columbia Park Elementary School is located in one of the county's most disadvantaged communities. Heavy drug activity and community violence plague the neighborhood that surrounds the school. Nearly all children who attend this school live in households that receive some form of income support. In 1983, Columbia Park ranked very low on most performance indicators including academic achievement, in which it scored considerably below the national average in all content areas.

About this time a new principal was appointed to Columbia Park and she immediately began implementation of the Comer School Development Program. This program energized a heretofore inactive parents' group to become a force both in home-school and community affairs.

The tandem of School Development and the Effective Schools Process resulted in steady academic gains by Columbia Park students. By 1988, the school was considered among the highest performing schools in the county. In 1988-89, Columbia Park received the Secretary of Education's National Recognition Award in acknowledgment of its outstanding performance.

SUMMARY

The period between 1984 and 1989 was one of substantial change for the Prince George's County Public Schools, at both the school and system levels. In its request for this paper, the Department of Education presented several specific questions about the change process. Although answers to most of these questions are embedded in earlier discussions of "Key Lessons Learned," the following are specific responses to these important ideas.

1. Initial Goals

The central objective of the school improvement effort in Prince George's County was to revitalize a school system that had become demoralized by its diminished status in the community and in the Washington metropolitan area. Accomplishment of this goal would instill a greater sense of efficacy in the schools and reverse downward trends in student achievement. School officials decided at the outset to center the transformation process at the local school site. Almost immediately, the system attempted to identify and remove administrative barriers hindering the improvement efforts of local schools.

2. Reaching Consensus

Gaining consensus for fundamental school change was accomplished with a three-stage strategy. First, the superintendent exposed the problem in graphic terms. Data on low student achievement, suspensions, dropouts, attendance, course enrollments, and disparities between black and non-black students impressed upon the target audience the severity of the problem. Second, with this information the school leadership persuaded the community and school staff, especially the principals, to accept ownership of the problem and express a willingness to reverse downward trends. Third, in return for the schools' willingness to "own" the problem, the system endowed principals and their leadership teams with the status, authority, and support they needed to solve the problem.

3. Major Obstacles

The major obstacle facing the change process in Prince George's County was the organizational inertia that had built up during the decade prior to 1984. School officials and staff had grown complacent with time-honored management styles and philosophies that in many ways prevented real, positive change. The superintendent purposefully shattered this lethargy with an ambitious set of performance expectations, goals, and the strategic release of data. Moreover, by taking these steps, the superintendent created community pressure on his own organization to perform at a high level.

4. Training

The Executive Leadership Training Program is the primary professional development activity in Prince George's County. Principals and executive administrators meet four times a year to study and discuss key topics. During 1990-91, for example, professional activities centered on the black male achievement and multicultural education initiatives. School-based staff development projects are customized by principals and their school leadership teams so that they support the important goals in the school's improvement plan.

5. Mechanisms for Feedback and Measuring Progress

Currently schools receive regular reports from central and area offices on progress they have made toward their annual school-based goals. These reports include relevant data on student achievement, suspensions, course enrollments, and dropouts. Beginning in November 1991, the Maryland School Performance Program (MSPP) will release performance reports for every school in Maryland. This collection of key performance indicators will be cross-tabulated by race and gender, allowing schools to pinpoint problem areas and track school progress longitudinally.

6. Timeframe and Cost

The essential structures of the school improvement program in Prince George's County were mounted over a 3-year period. This allowed schools to establish a planning foundation, develop skills at the school level to assess needs, build teams, design improvement plans, begin implementation activities, and evaluate the effectiveness of the effort. After the initial implementation period, it has taken most schools about 3 years to reach a comfort level with the change process. Recent development activities have centered on the school budgeting process. In many cases, the school improvement program has pressed schools to the limits of their current capacities, given the nature and complexity of deploying resources and making hard decisions about how to allocate school staff.

The cost of this project is hard to gauge, but several essential elements of the process do carry hefty price tags. The cost of staff development for the Prince George's project has been relatively modest in straight dollar terms. The major cost of staff development is not the seminar series but, rather, the time required to transfer school decisionmaking skills to school staff. School teachers and administrators must have a sufficient allotment of days to learn about the school change process. Ideally, staff development should be school-based and aligned with the school's improvement objectives. School systems that are serious about systematic change should avoid the smorgasbord approach, or similar shortcut strategies to staff development.

A second cost component of the school change process is a high-powered management information system. An important lesson from the experience of Prince George's County is that effective school-based planning will only be as good as the quality of data provided to the schools and, in turn, the capacity of school staff to use the data effectively to foster program improvement. Effective communication of this data to parents is yet another challenge for schools engaged in the change process. A final cost implication of the change process for the school organization is the need for a sound technical assistance mechanism within the school system. In Prince George's County, the main conduit for this support is the area administrative office.

REAL CHANGE IS REAL HARD: LESSONS LEARNED IN ROCHESTER

**Adam Urbanski, President
Rochester Teachers Association**

Adam Urbanski describes reform efforts in the Rochester public school system. Urbanski emphasizes the cooperative spirit of union-management negotiations that created a peer review and assistance program, provided more pay to teachers who assume additional responsibilities, and involved teachers as "guardian angels" for at-risk students. The reforms, however, faced considerable opposition from teachers who feared the burden of increased responsibility and the potential for blame if student performance did not improve, from administrators who feared that empowering teachers meant disempowering administrators, and from taxpayers skeptical of the benefits of increased spending.

Although Urbanski cautions that "real change takes real time," he offers multiple indicators that Rochester schools are making progress: more home contacts by teachers, a 50 percent increase in teacher applicants, higher student grades, fewer students held back, fewer special education placements, and fewer long-term suspensions.

In the early 1980's, the Rochester City School District decided to collect, publish, and analyze data about the lot of its children and the success of its schools. The results proved startling and confirmed the prevalent fears: low student achievement; high dropout rates; children affected adversely by poverty, alienation, and disaffection. We learned that, not unlike so many other urban school districts in America, ours too could be described as an educational "intensive care unit."

More than 70 percent of our students are of African-American or Hispanic descent. More than 65 percent live in poverty, and the majority are from single-parent homes, principally headed by women. Nearly 30 percent of our students drop out of school each year, and almost 50 percent of our ninth-graders never make it to graduation at the end of 12th grade. Perhaps the most telling statistic is that 80 percent of our entering kindergartners are already assessed as being 1 or 2 years behind in readiness skills. We are learning, the hard way, that "children at risk" get to be that way before they are 5 years old, and that teachers and schools are at a disadvantage even before they have first contact with their students.

Other social conditions add to the challenges that our schools face. For example, we have daycare centers for the children of our students in virtually every high school in Rochester; we have some students who have already had their third child; we have some students who miss

the first day of school because they are registering their own children in our kindergartens. Also, each year more than 100 Rochester teachers formally report that they have been assaulted by their students, and we suspect that two to three times as many assaults on teachers go unreported. The weapons possession problem in our schools is so widespread that our Board of Education amended the student discipline code, which now does not permit us to recommend students for long-term suspension for "mere possession" of dangerous weapons. A student must first actually use a weapon, or we must prove that he or she brandished the weapon "with intent to use."

Under these circumstances, it is understandable that we favor change. For us, status quo is a euphemism for "the mess we're in." Simple common sense tells us that the surest way to continue to get these lousy results is to do everything the same lousy way: If we always do what we've always done, we will always get what we've always gotten. Besides, it seems futile to agonize over whether or not to change, because change is inevitable; only growth is optional.

Under the leadership of the local chapter of the Urban League, Rochester launched a communitywide initiative to improve its public schools. After nearly a full year of research and debate, a Call to Action was issued, challenging every segment of the community to do its part and to contribute toward solutions to what ails our schools and our students.

Educators then began to restructure schools and the teaching profession. Four years ago, we negotiated and implemented the Peer Assistance and Review (PAR) Program, which involves teachers in monitoring quality within their own ranks by providing mentors for inexperienced teachers and by offering assistance to experienced colleagues whose performance should be improved.

Building on the PAR Program, we have now developed a career path that, while retaining them as practitioners, allows teachers to assume leadership in matters relating to instruction and to the profession. This Careers in Teaching program consists of four levels: intern teachers, resident teachers, professional teachers, and lead teachers.

The incorporation of peer review and the provision of additional professional options for qualified teachers distinguish our plan from merit-pay schemes that purport to be "career ladder" programs. Lead teachers achieve higher status and pay in exchange for accepting more responsibility and working a longer school day or year. Rochester's Careers in Teaching plan incorporates another feature that directly attacks a major obstacle to student learning: the frequent failure of schools to match the toughest teaching assignments with those teachers who are best equipped to accept them, the experienced and expert lead teachers. Under the current structure, the most "challenging" students often fall, by default, to the least experienced and most vulnerable teachers.

The Rochester pacts also call for shared governance through a school-based shared decisionmaking process. Playing a major role in shaping the instructional program and other school dynamics, teachers, parents, and students participate in decisions about filling vacancies for staff positions in their schools, the school budget, and other key areas. The contractual agreements in Rochester also established significant pay raises for teachers; top pay for lead teachers is nearly \$70,000. The starting pay is \$29,000; average pay is \$50,000.

After much spirited debate, teachers also agreed to serve as case managers ("guardian angels") for some students—assuming the responsibility for nurturing the students' readiness to learn. This Home Base Guidance program became one cornerstone of the new definition of teaching in Rochester. Initially, not all teachers embraced the expanded expectations, to say the least.

Even more important than the provisions of the Rochester contracts is the spirit of the settlements. Achieved through a process best described as "principled negotiations," the agreements are based on trust, mutual respect, and labor-management collaboration. Union and management share a joint commitment to the notion that unionism and professionalism are complementary, rather than adversarial; that there is no reason not to use the collective bargaining process to build a genuine profession for teachers; and that empowerment must be accompanied by accountability.

The first lesson that we've learned is that opposition to change can sometimes come from the most unexpected sources—in this case, from the teachers themselves. Although they are not wedded to the status quo that they played little role in creating, teachers worried that too much may now be expected of them.

"I thought we would be canonized, but instead they put us in front of the cannon," remarked Tom Gillett, union vice president and chief negotiator, shortly after the vote on the 1987 teacher contract.

Indeed, we were somewhat surprised by the reception at the union's contract ratification meeting. After all, the 3-year pact called for a 93 percent increase in starting pay, gave teachers greater say in educational decisionmaking, and launched an unprecedented era of good feelings between labor and management. And, in the end, it was approved by a 7 to 1 margin—though the two previous contracts were ratified by a 25 to 1 margin.

"What if they pay us a competitive wage, let us make instructional decisions, and students still don't succeed?" asked one teacher who stepped up to the microphone. "Then they'll blame us!" he exclaimed. "They also blamed us when they didn't pay us much and we had no decisionmaking involvement," I retorted.

Perhaps the single greatest cause for anxiety—during the contract ratification meetings and long thereafter—centered on the issue of "agreements to agree." Ironically, what we considered to have been a major strength of the contract was perceived by many as a principal weakness. During negotiations, the union proposed, and the district agreed, that we refrain from hammering out all the details and specifics of the major education reform agreements. Instead, we agreed to the general concepts (such as school-based planning, Home Base Guidance, Careers in Teaching) and a timetable for implementation. The details were to be negotiated later, on an ongoing basis, with considerable opportunity for input from teachers and others in the Rochester education community. We thought this was an ideal way to model what we preached. After all, you can't "empower" teachers if you prescribe and dictate all the specifics of the new agenda for them, right?

Wrong! "Where are the details?" was the persistent outcry. "How do we know exactly what we are supposed to do?"

Eventually, the details were worked out. Through open forums, written communiques, faculty and department meetings, focus groups, and other channels—including multiparty "neonegotiation" sessions—we managed to flesh out all the agreements to agree. It took nearly 2 years, and the process of adjusting the details continues on an ongoing basis. From the very beginning, Rochester's school superintendent Peter McWalters described the reform and restructuring initiatives in Rochester as a "search." As such, we view it as mainly an inductive process that requires considerable flexibility and willingness to learn from experience. Negative findings are valued no less than successes.

But change in education is difficult. It means doing things differently, not just longer or harder than what we already do. It is difficult also because we confuse what is familiar with what is natural. Letting go of some practices is proving more difficult than adding on new ones. And because most of us were schooled in the very type of institutions that we are trying to change, many of us hold suspect any school that does not resemble the school that we remember.

There are turf wars, too. The Association of Supervisors and Administrators of Rochester, who filed suit in the New York State Supreme Court against the district and the teachers' union, continued to fight the reforms through appeals and other forms of opposition. Many expressed the fear that empowering teachers necessarily "disempowers" school administrators. Some perceived leadership as something that diminishes when it is shared with others.

Administrators' lack of cooperation took various forms: failing to cooperate with new programs, refusing to submit required recommendations, blocking communication, and interpreting the spirit of the contract in ways that were not helpful. ("Now that you teachers are getting the big bucks, I don't want to hear about any grievances....") It should be noted, however, that most administrators were not obstructionist and many contributed greatly to the progress of the fledgling reform initiatives.

Yet, it is not possible to significantly change the roles of teachers without affecting the administrators' traditional roles. Nor is it possible to decentralize the school system while also maintaining a bloated central office bureaucracy. In Rochester, for example, there is one administrator for every seven teachers and the school district spends 4 percent of its total budget on central office operations (New York City, Buffalo, and Albany spend 2 percent).

The call for eliminating layers of administration (a problem prevalent in our secondary schools) and decreasing the size of the central office bureaucracy ran into strong opposition from the administrators, the Board of Education, and from some teachers. In fact, teachers at some secondary schools petitioned the school board not to cut their administrators. In the end, very few school administrators were cut from the budget. The superintendent of schools, however, managed to get the Board's approval for his recommendations that some instructional administrators teach for a portion of their time.

The notoriety that sometimes accompanies a reform effort represents a mixed blessing. Its principal advantage has been the opportunity for greater access to those who wrestle with similar issues in other districts. And the publicity also makes it more difficult for key players to back out of the commitments.

The disadvantages are also formidable. The media tend to either exaggerate or to simplify the situation. ("Teachers in Rochester earn \$70,000 a year....") Glowing accounts exacerbate the frustrations ("Am I empowered yet?") One Rochester teacher from a particularly troubled school sent me one such article from a national newspaper. "Never before have the empowered felt so helpless," said the accompanying note.

And what about results? Are student success indicators any better? Well, although we are learning that real change is real hard, we have been able to demonstrate some improvements and some promising patterns over the last few years. Superintendent McWalters has said, "If student performance is the measure, then every one of the measures is moving in the right direction." He lists the following accomplishments:

- The percentage of elementary students promoted has increased at each grade (93 percent at the end of 1988-89).
- Fewer elementary students are being enrolled in special education classes.
- Elementary students' performance in reading and mathematics continues to improve.
- Reading performance of sixth graders in middle schools has improved.
- More eighth graders passed English, math, science, and social studies.
- There been a sizeable increase in the proportion of students scoring A, B, or C in science.
- More students are enrolled in Regents courses.
- More students are interested in college and are taking the Scholastic Aptitude Test. The percentage of minority students taking the test increased from 25 percent in 1986-87 to 50 percent in 1988-89.
- Fewer students are receiving long-term suspensions.
- The district is better able to attract and retain good teachers. (There has been a 90 percent increase in applicants).
- There are more home contacts by teachers; 73 percent of parents of middle school students surveyed earlier this year reported that they had direct contact with the home-base guidance teacher by mid-year—up from 45 percent in 1988-89. Of those parents, 82 percent said that they found this home-school communication helpful.

McWalters summed up his case with the following observation: "We do not ask the community to lend the district continued support in the absence of evidence that we are making progress toward our goals. Rather, we ask the community to extend its support in the context of real gains that we have made, both in improving student performance and in restructuring ineffective practices."

Although we are not completely satisfied with the results so far, we plan to build on these incipient and encouraging indicators. After all, we have already managed to arrest the overall downward trend at failure—a necessary step along the way to more dramatic improvements in our time. "Never discourage anyone who continuously makes progress, no matter how slowly," Plato wisely cautioned.

The public in Rochester, however, insists on more dramatic evidence of success. The clamor for results started only months after the 1987 contract was ratified.

"All right, Urbanski," a taxpayer said to me, "it's been months since you got that big fat contract for your teachers. Show me the results! Are the test scores up?"

"Well, real change takes real time," I said, trying to defend myself.

"Well, that's real nice, but you took the money real quick," he retorted.

The public's impatience surfaced visibly during the period of negotiations for a successor contract to the 1987 agreement. That year-long ordeal witnessed panic by teachers (resulting in one defeat of a tentative agreement), outspoken and organized opposition to the teachers by many in the community (resulting in a second defeat of a tentative contract), and a series of serious disagreements that threatened the cooperative labor-management relationship. But, although battered and bruised, the relationships survived—perhaps even stronger now that we know that we've been seriously tested and have not succumbed. In fact, we view the pain that we are experiencing as evidence that we are indeed changing business as usual.

"Reformers have the [wrong] idea that change can be achieved by brute sanity," George Bernard Shaw once observed. It can't. As we have learned, it requires the willingness to survive some false starts, wrong turns, and negative findings. It may even necessitate the adoption of Winston Churchill's definition of success: "going from failure to failure with undiminished enthusiasm."

Our enthusiasm has been admittedly dampened, but our determination has not been diminished. There is too much at stake: labor-management cooperation, the education reform initiatives, the building of a teaching profession, the improvement of schools, and the very survival of public education in our community. Most important, what hangs in the balance is the question of whether or not we will continue the communitywide effort to ensure that more children learn better in our schools.

I believe that we must.

THE CALIFORNIA PARTNERSHIP ACADEMIES: DESIGN AND IMPLEMENTATION

Marilyn Raby, Director
Curriculum Services, Sequoia Union High School District (CA)

Marilyn Raby, who developed the original Peninsula Academies in California, describes the implementation of the school/business collaboration for dropout prevention. In response to the rapid increase in the number of educationally disadvantaged and disaffected students, the Mid-Peninsula Urban Coalition, a community-based organization involved in improving minority employment, was successful in forming a partnership between the school district and several major high-technology companies in the area to confront the problem of youth unemployment.

Raby emphasizes that planning—development of program goals and the components needed to achieve them—was crucial to the success of the program. Companies must have specific responsibilities and roles that they know are important to the success of the overall program; commitment of companies to the program must be carefully maintained over time; a sufficient number of companies is needed to share the major responsibilities of providing jobs, mentors, speakers, and field trip sites, and securing involvement of other businesses. On the school side, it is important that a single administrator is given exclusive responsibility for the Academy—preferably someone with a special interest in the program.

BACKGROUND

The Sequoia Union High School District (SUHSD) serves a diverse community and student body in an urban/suburban area on the San Francisco Peninsula just north of Silicon Valley. Its 6,500 students come from eight small cities and range from highly educated, affluent, and white to educationally disadvantaged, poor, and minority (primarily Hispanic and black). SUHSD has four comprehensive high schools, grades 9-12. Students are bused from the minority communities to achieve racial balance.

In the late 1970's, SUHSD was starting to experience rapid growth in its percentage of minority, limited-English-proficient, and other educationally disadvantaged students. At the same time, many other students were confronting major personal problems, such as drug abuse and single-parent families, which were causing them to become alienated from and indifferent toward high school. Both groups were disaffected with the educational process and did not associate their high school education experience with any realistic post-high school aspirations. A

significant number of these students had little motivation to succeed and dropped out of school with no job competencies.

The employment picture on the Peninsula presented a different problem. There were literally hundreds of jobs available, yet many minority and people of lower socioeconomic status did not qualify for even the semiskilled, entry-level openings. Minority unemployment was nearly 20 percent and minority youth unemployment was approaching 50 percent. At the same time, many businesses in the area had entry-level jobs for which employees with the proper skills could not be found. Given the intensely competitive international marketplace, high school performance and student transition to work were extremely important issues to the business community.

In 1980, the superintendent of SUHSD decided to attack the high dropout rate of the District's at-risk students by creating the Peninsula Academies¹ program in two of its schools: the Computer Academy at Menlo Atherton High School and the Electronics Academy at Sequoia High School. These academies were adapted from the Philadelphia Academies, a vocational education school/business partnership, to meet the needs of students and employers in a high technology community.

Academy students are enrolled in a core academic program consisting of English, mathematics and science, plus a vocational laboratory course. The contents of the core academic courses and the laboratory course are integrated and taught in a school-within-a-school environment. The curriculum is rigorous, includes practical work simulations, and meets all California State requirements for graduation and entrance to college. A strong career development component stresses job readiness skills, career planning, interview techniques, college admissions procedures, etc. An exemplary mentor program that includes first-hand exposure to career information is provided through the partnership with local business. Students enter the program in the 10th grade. Those meeting Academy standards in grades 11 and 12 are rewarded with well-paying jobs in local business.

INITIAL ACTIVITIES

SUHSD did not have the fiscal resources to develop the program, so the superintendent asked the director of the Mid-Peninsula Urban Coalition, a local community-based organization involved in improving minority employment, to act as a broker to help obtain the required funding through a business partnership and foundation grants. The coalition was successful in gaining a commitment to form a partnership from several major high technology companies, notably Hewlett Packard, Varian Associates, and Lockheed Missiles and Space. The coalition obtained funding for a program director and other start-up costs through the Edna McConnell Clark, Hewlett, and Packard Foundations. The American Institutes for Research (AIR), a consulting firm, was selected to provide technical assistance and program evaluation.

¹In 1984 California passed legislation that funded academies programs throughout the state and renamed the program "The Partnership Academies."

Two committees composed of representatives from the Urban Coalition, SUHSD, and business were formed to do the early planning and determine the curriculum. They began meeting in 1980 to develop key program goals, determine the components needed to achieve them, and plan for the start of the program in the fall of 1981. This emphasis on planning was crucial to the success of the program.

The program goals decided upon were:

1. to serve an educationally disadvantaged and largely minority population of students who were not successful in traditional school programs, dropped out of school, and lacked employable skills;
2. to meet the vocational training needs of these students and to satisfy the needs of local employers to fill skilled and semiskilled positions in the selected fields of training; and
3. to confront the problem of youth unemployment among the target population and to establish a model for possible use in other school districts and localities.

Key components of the program were:

- an at-risk population made up largely of educationally disadvantaged students of lower socioeconomic status;
- interrelated academic and technical courses tailored to the career interests and needs of students and local business;
- a common released period for teachers to develop the integrated curriculum;
- small class size (20-25 students, 5-10 students less than the SUHSD average);
- a 10th through 12th grade school-within-a-school staffed by teachers who volunteered to work with at-risk students;
- tutoring and individualized instruction;
- careful monitoring and reporting to parents of individual student performance and attendance;
- a full range of counseling and support services;
- emphasis on employability skills of punctuality, cooperation, initiative, and good communication;
- active participation in the program by local business;
- first-hand exposure to career information through field trips and guest speakers;

- a mentor program sponsored by local business; and
- student opportunities for summer jobs upon successfully completing their junior year and part-time jobs during the last semester of their senior year.

The planning committee was charged with securing active business participation in the program. The committee found that to successfully involve business, companies had to have specific responsibilities and roles that they knew were important to the success of the overall program; commitment of companies to the program had to be carefully maintained over time; and, a sufficient number of companies was needed to share the major responsibilities. Companies were asked to make a commitment to provide jobs, mentors, speakers, and field trip sites. They were also asked to promote the program and help involve other businesses.

The curriculum committee began its work by determining the technical skills needed by industry. Committee members consulted with personnel from the school district, business, the San Mateo County Office of Education, and Stanford University to specify learning objectives for the academic and the technical courses. They surveyed curriculum outlines and materials used by other districts, then identified textbooks, instructional materials, and equipment needs. This preliminary curriculum work was important to the success of the program, but it was only a beginning.

The Academies teaching staff was recruited and hired. The superintendent and members of his staff made presentations at each school to ask for volunteers. Only three teachers in a school district of more than 300 teachers volunteered. Additional teachers were hired specifically for the program. The vocational technical courses in computers and electronics were taught by people on loan from two of the participating companies, Lockheed and Hewlett Packard.

The reluctance of the teaching staff to participate probably occurred because the program wasn't explained adequately. Many thought that it was just another vocational education/work experience program. Union members didn't want extra funds expended on the Academies because they felt it would be at the expense of the regular program. Others were concerned their colleagues might harbor resentment toward them because of the smaller class size, instructional aides, and released planning period. In addition, there was reluctance to take on teaching assignments that dealt exclusively with the disadvantaged. This concern was compounded because, although all the students in the program were at risk of not graduating from high school, they entered the program with a broad range of abilities, skills, and attitudes. Classes composed of such students are more difficult to teach than regular classes.

The concerns of the teaching staff were resolved over time by having the Academies staff make a concerted effort to win over their colleagues. This was accomplished in part by making other teachers aware of the Academies teachers' extra responsibilities and the otherwise unavailable short- and long-term opportunities provided for at-risk youth. The local school administration was enlisted to further explain and support the Academies concept by making presentations at staff meetings. In addition, Academies staff discussed the program informally with colleagues and invited them to such events as the annual Academies breakfast, where students described their summer work experiences and honored their job supervisors and mentors. Contacts and expertise gained from private industry were shared with staff from work experience and other vocational programs, thus minimizing competition for students, jobs, and program

prestige. Although there are still individual teachers who complain about the extra planning period given to Academies staff, most teachers recognize the merit of the model and even use some of its components in their classes.

Recruitment for the first Academies class began in the spring of 1981. The target population was students with a record of underachievement, a pattern of irregular attendance, low motivation or disinterest in the regular academic program, and disadvantaged socioeconomic status. Potential students were identified by requesting recommendations from ninth grade teachers and from counselors. Brief presentations were made and brochures distributed to lower track classes. Students who expressed interest were invited to a followup meeting where the program was more fully described, questions were answered, and applications for entry into the program were made available. Information on each applicant was assembled from permanent records and from input from teachers, counselors, and deans. Attendance, grades, referrals for disruptive and disrespectful behavior, test scores, and other pertinent data were examined. Applicants who met the Academies criteria were interviewed in small groups by Academies teachers.

After the preliminary selections were made, invitations to an evening meeting were mailed to the selected students and their parents. At the meeting, parents were given the opportunity to learn more about the goals and expectations of the program from the staff, the district administrator, and industry representatives. They were asked to sign a contract stating that they would help in dealing with behavior/motivation problems of their children and would provide support for program activities. Counselors were then notified so that they could prepare the required block scheduling of selected students. When it is carefully done, this recruiting process works well. If it is perceived that the Academies staff is not selecting students according to Academies criteria but instead is "creaming" (recruiting students able to graduate without extra help), there is justifiable resentment on the part of non-Academies teaching staff.

PROGRAM MANAGEMENT

During the first years of the program, ad hoc committees composed of representatives from the Urban Coalition, the schools, and business were formed to handle specific issues. The School Operations Committee was responsible for the day-to-day operation of the program, such as scheduling and setting performance standards. The Student Selection Committee handled student recruitment and selection strategies. The Resources Committee arranged for business participation in the form of mentors, speakers, and field trips. The Curriculum Development Committee was responsible for ensuring that the curriculum met the needs of business, represented current and emerging practices, met State curriculum and vocational standards, as well as SUHSD graduation requirements. The Work Experience Committee, responsible for obtaining mentors and work experience positions from business, was formed last, as its function was not required until the second year of operation.

Initially, no single administrator from SUHSD's district office was given exclusive responsibility for the Academies. This was a serious mistake. Although the schools agreed to assume responsibility for curriculum development and for organizing the instructional program, the amount of staff time required to carry out these responsibilities was underestimated. Administrators assigned to the program were either committed to other programs and not

interested in the Academies or felt that the Academies were draining resources from programs they favored. This handicap led to an initial lack of broad district support for the program. The problem was resolved when the director of special projects, who had a special interest in the Academies and the success of its target population, was given district responsibility for the program. She insisted on making the program as academically rigorous as possible, in contrast with the traditional vocational education approach of a training program with some basic skills attached. She knew that no one could possibly predict what type of jobs the students would ultimately hold; therefore, a solid academic foundation was required if they were to be prepared for jobs in the future.

The final Academies management structure evolved during the first years of implementation. Initially, the Urban Coalition took the lead in directing the program and bringing together the business and school partners. It also took on some responsibility for student recruiting and total responsibility for job placement and for liaison between the job sites and the school personnel. During the third year, the Urban Coalition's management role was gradually phased out as the Academies program became a two-way partnership between business and the schools.

EVALUATION

Because it was apparent from the outset that the Academies program had potential as a model school-to-work transition program for at-risk youth, a formal evaluation was needed to document the activities of each of the first several years to give the program credibility. The evaluation was carried out by AIR through a grant from the William and Flora Hewlett Foundation.

The first task of the evaluators was to assist in the clarification of the program goals and the development of measurable objectives. Process data were gathered that included management mechanisms; student selection; student profiles; program activities that included curriculum development, career education, and work experience; and the quality and quantity of resources committed to the program by its participants. The data were gathered through annual surveys of program participants, classroom observations, participation in committee meetings, and discussions with program participants.

The second task of the evaluators was to do an outcome assessment. Academic progress was measured through enrollment and attendance data. This included number of students enrolled in each Academy by grade, ethnicity, and sex; daily attendance rates compared to all students at each high school and compared with a control group of matched students; number of unexcused absences compared with the control group; and percent dropping out of school compared with the control group. Academic achievement was measured through grades, credits earned, and proficiency test scores compared with the control group. Employability gains were measured through number of students placed in summer jobs and senior work experience positions, evaluations by job supervisors, and number of graduates finding employment. This part of the evaluation was based on responses to survey questionnaires by students, parents, teachers, industry mentors, and work experience supervisors.

Students who dropped out of the Academies were interviewed by telephone to find out why the program was not satisfactory for them. A sampling of parents participated in structured telephone interviews to rate the program's components and the impact on their children. The Academies staff, school principals, instructional vice principals, and the district program director were all interviewed to rate the instructional components of the program, its overall planning and management, and the effect of the program on students, the school, and the business community.

A sampling of mentors and business members of the advisory committees was interviewed to determine the reasons for their involvement in the program, ratings of the program components, and effectiveness of its planning and management. Job supervisors completed evaluation forms to rate all students placed in summer jobs and work experience positions on their accuracy, reliability, job learning, punctuality, attitude, and so on.

The evaluation proved that the Academies program of academic study, combined with vocational/technical course work, had a positive impact on at-risk students. Their attendance and school retention rates improved, and there was a positive effect on their employability. When graduates were interviewed to learn of their postgraduation experiences, it was found that over 90 percent were enrolled in postsecondary education, working, or both.

FUNDING

Although the evaluation showed that the program was succeeding, seed money from the foundations was almost depleted. SUHSD could not afford the approximately \$750 per student per year incremental costs of the program. In 1984, the coalition's and school district's program directors drafted legislation to provide for replication of the Academies program throughout the State with the Peninsula Academies program being funded as the exemplar. The legislation was sponsored by their local assemblyman, passed by the State legislature, and signed by the Governor. An expansion of the number of replication sites was approved in 1987.

The legislation provides State grants that are performance based. Each grant requires a full match from both the receiving district and from the supporting business. An initial planning grant of \$15,000 is given to each Academy. Districts receive funds at the end of the school year, the amount based upon the number of students in the program who meet specified performance standards. Reimbursement at the 10th and 11th grade levels is based on a minimum of 80 percent attendance per year and the earning of 90 percent of the credits required by a full academic load. Reimbursement at the 12th grade level is based upon the completion of all graduation requirements no later than the summer immediately following the end of the school year. At present, there are 50 funded Academies in California in partnership with businesses ranging from high technology to agribusiness.

In 1989, the U.S. Department of Education funded Academies at Sequoia's other two high schools as national demonstration sites for dropout prevention through the use of vocational education. These new Academies focus on business technology and emphasize the use of computer technology as a teaching/learning tool to accelerate student mastery of basic skills and to improve their critical thinking and problem-solving abilities. Both Business Technology Academies have fully networked, state-of-the-art computer laboratories that are used to integrate

interactive technology into the English, social studies, mathematics, and business technology curricula. Teachers have been provided extensive technical training in the use of networks and multimedia.

Although the active participation of business is crucial to the program, it has not been an easy process to manage. A variety of methods has been tried, including teacher coordination of the process. Coordinating the business activities proved to be a difficult task for teachers. Released time for this work can be very expensive for the school district. Loaned executives have worked well when companies could provide them, but they are not a stable resource, as they have to return to their jobs in one or two years. They are also subject to removal if the company has to trim expenses. The use of a retiree as the business liaison is a promising practice at the Business Technology demonstration sites. Retirees bring a wealth of interest, commitment, and experience to the program at a generally much lower cost.

CONCLUSIONS

After 10 successful years, the Academies are still not easy programs to implement. They succeed or fail depending upon the support and commitment at both the district and site levels, because the school-within-a-school format represents a significant departure from normal school operations. Capital outlay for the purchase, maintenance, and replacement of obsolescent equipment is substantial. The extra time and training required by teachers to master instructional strategies that address the needs of disadvantaged and limited English-proficient students, and to integrate the curriculum, is costly and ongoing.

Academies require determination, vision, and hard work. Yet the many opportunities they offer for student success make them worth the effort. The content of the integrated curriculum, and the emphasis on technology, restructures the students' learning environment. The mentors and work experience connect the learning to real life and allow students to see what effort in school and good grades will get them. Most important, the sustained contact with teachers who are self-selected and committed has a profound psychological effect: it makes Academies personal and humane places. As a teacher said, "Academies are what teaching is all about"; and as a student said, "There are no orphans in the Academies."

THE BOSTON UNIVERSITY/ CITY OF CHELSEA PUBLIC EDUCATION PARTNERSHIP

**Peter Greer, Superintendent ad Interim
Chelsea (MA) Public Schools**

In a historic partnership between a private university and a public school system, Boston University joined with the City of Chelsea, MA, in an effort to transform the Chelsea school district into a model of effective education for disadvantaged students. In describing the partnership, Peter Greer, superintendent ad interim in Chelsea, points to the project's joint use of the top-down and bottom-up management approaches to reform, the creation of parent information centers and school health clinics, efforts to develop parents as teachers in the home through literacy and a home instruction program that uses Chapter 1 funds to provide parents with learning tool kits, daily lesson sheets, and a support system of home visitors.

Greer also discusses how the Chelsea project is working to overcome two major obstacles to the partnership: teacher resistance to top-down reform and low parent involvement.

First, it is important to describe the initial purpose, scope, and goals of the partnership. The partnership, established in 1989, is usually labeled as a university "takeover" of a K-12 public school system. This partnership is distinguished from other national reform projects by the 10-year period and by the unusual terms of the contract between Boston University (BU) and the City of Chelsea, MA. These terms authorize the University to manage the entire Chelsea school system, with a limited review opportunity by the Chelsea School Committee, and also to commit the resources of the 15 schools and colleges and other organizations at Boston University to the partnership. Accountability is assured by the state legislature, the state school board's oversight panel, the watchful eyes of the national and international media, an outside evaluation group that has contracted with the U.S. Department of Education, the president of Boston University, and various official and unofficial community groups. The partnership focus is a comprehensive approach that involves a meld of preparing teachers to teach, preparing students to learn, and ensuring that a quality curriculum is being effectively taught to the students.

Chelsea a fire-damaged (1908, 1973) city just across the water from affluent Boston, has a general population of 27,000 and a school-aged population of 3,700. The student population is 70 percent minority (54 percent Hispanic, 11 percent Asian, 5 percent African-American). The statistics were appalling: 52 percent dropout rate, one of four teenage girls a mother or pregnant, test scores among the lowest in the State, and combined SAT scores that totalled 655 out of a possible 1,600. The poverty is extreme, with one-third of the households earning less than

\$10,000 a year. The newest students are Vietnamese "street children" and Central American "farm children." The teachers' salaries were among the lowest in the state. The city government supported the schools with only 17 cents on the tax dollar. Fully 90 percent of the school funding came from the state and federal governments.

Boston University President John Silber is the architect of the partnership. His reasons for involving the university in such a risky venture are simple and persuasive: to prove that the cycle of poverty can be broken through effective education; to demonstrate that universities and colleges must become aggressive and improve the education of children in the nation's 15,200 school systems (or there won't be enough qualified students to enter institutions of higher education); to bring to bear the power of the university in reinvigorating the nation's economic and moral health; and to disseminate the results from the partnership to other schools.

What are two of the obstacles that have been encountered and how were they addressed?

One obstacle encountered by the university was the tension between two theories of change: the top-down approach of the mid-1980's and the newer, but untested, bottom-up approach. There are those who believe in the bottom-up approach to reform, which relies on process and an assurance that all participants have reached a consensus when dealing with a problem. The university is convinced that there is room in the national reform effort to use a top-down management approach when it is timely and necessary. The university anticipated great difficulty in bringing about change in Chelsea because of these two conflicting views.

In the late fall of 1989, the university discovered that there were no formal teaching objectives for Chelsea teachers in grades K-12. The university was convinced that formal teaching objectives provide an intellectual agenda for attempts to improve staff development, which in turn will improve student achievement, the one telling outcome of education reform. Informed that the Chelsea teachers were willing, but hampered by financial neglect, little time for training, and lack of awareness of recent research on content and instructional techniques, the university knew it must take the lead, although it would be treading on dangerous ground.

In addition, the university realized that the Chelsea teachers were distrustful, expecting the large university to bully tiny Chelsea, forcing change, and refusing to listen to teachers. The university believed that to use only the bottom-up approach, with the complete involvement of the professional staff, parents, and citizen's groups, would take about three years to complete a list of teaching objectives—and that the students must not wait that long. As a consequence, the university decided to risk using a top-down/bottom-up approach to develop teaching objectives.

The university went to work. In February of 1990, they gathered a team of experts consisting of two administrators from Chelsea and a group of professors who were not only at the cutting edge of their fields—i.e., history, literacy (reading, literature, writing), science, and math—but who also had the experience to enable them to work effectively with teachers. These professors were led by Dr. Carole Greenes, associate dean of the BU School of Education, a master teacher and successful textbook writer active in mathematics reform. Greenes worked with professors and administrators over a 3-month period; the group prepared a first draft of research-based teaching objectives for grades K-8.

Chelsea Chapter 1 specialist Janis Rennie developed teacher focus groups, organized by grade level and school and led by Chelsea staff, that critiqued the first draft of the teaching objectives. This activity was going on at the same time that the "work to rule" mandate from the Chelsea teachers' union was in effect. The Chelsea teachers' comments were closely examined by the university team and a second draft was written that highlighted the changes suggested by the teachers. The second draft was reviewed by the focus groups.

With the assistance of a grant from the Shawmut Charitable Foundation, Greenes prepared a Boston University summer workshop for Chelsea teachers to complete a final review of the second draft of the teaching objectives and to become more competent in teaching the 1990-91 objectives for grades K-8. There were sessions about the meaning of the objectives, the craft of teaching the objectives, and ways to assess progress. The teachers saw how a major concept in a field such as mathematics could be developed in a grade level and across the curriculum. Twenty-eight teachers volunteered for the summer workshop. The participants were from regular classrooms and from bilingual, special education, and Chapter 1 classrooms. Four teachers attended from each of the four elementary schools, with at least one teacher representing each of the four subject areas. This enabled the group to work across the curriculum as well as in the separate subject areas.

But there was an even more important piece of the plan to be implemented. The teachers had to try out their new knowledge and, with demonstration and coaching from university professors and graduate students, develop new and more productive teaching habits in their classrooms. Without this step, the teaching objectives would be simply paper to show the regional accrediting agency. A typical scenario for this implementation activity is best described by what Assistant Professor Suzanne Chapin (mathematics) carried on in Chelsea in the fall. Professor Chapin spent at least one full day each week in Chelsea, working mostly with nine teachers in grades K-5. Her sessions were centered at one of the schools. Chapin provided model lessons for each teacher each week, lessons based on the newly established teaching objectives. She explained, demonstrated, coached the teachers, sent notes, and provided other forms of incentives, and ensured that full sets of materials were available. In addition, Chapin offered after-school workshops for elementary math teachers from throughout the school system. From 5 to 15 additional teachers participated in those workshops.

What were the results? There was some criticism of the process involving the focus groups from an official of the Chelsea Teachers Union, to the effect that the process was top-down management by Boston University. The summer workshop did not have an auspicious beginning because the teachers were very wary of what the university was going to do. However, by the end of the first week, the professors and the Chelsea teachers were colleagues and were enthusiastically engaged in developing new skills and understanding.

During the fall activities, Chapin reported that some of the teachers embraced the new materials and skills for teaching the mathematics objectives, but a few of the teachers did not gain the requisite confidence, which meant that some teachers were not teaching a lot of mathematics. There was a lot of unproductive drill and practice. Obviously, mathematics must be taught often and well if students are to achieve in mathematics and gain self-respect from that achievement.

Toward the end of the second quarter of the school year, Chapin made her assessment. She was convinced that three of the teachers at the center school had profoundly changed their

teaching methods, had a serious focus, were actively involved, asked questions, and were covering areas related to the teaching objectives for mathematics. Other teachers demonstrated resistance to change and comfort with the status quo. The school's principal was more optimistic, reporting that all nine of the teachers had demonstrated significant growth.

What did the students appear to learn? The only parent comments brought to the university's attention were those from a small all-city parents' meeting. Several of the parents there commented that they couldn't believe the changes in the teaching at the center school. They were thrilled. The students took the Comprehensive Test of Basic Skills in April 1991. The period of time between September 1990 and April 1991 is too short to enable Chelsea or Boston University to make extravagant claims about effectiveness. However, the following represents the Normal Curve Equivalents in mathematics for the students in the center school:

<u>Grades</u>	<u>1990</u>	<u>1991</u>
2	62	73
3	52	NA
4	43	35
5	45	54

The problem of developing these teaching objectives and the change process involved in addressing the problem yielded several items of interest. First, the entire process took only 6 months. That is, it was only 6 months and not the 36 months that a different process might have taken from the time the university team put together the first draft of the teaching objectives to the time that several of the teachers were involved in teaching using the new objectives. Second, it was a problem having a professor spending substantial amounts of time in Chelsea, while carrying a full load at the university. Moreover at most universities there are no incentives for such work by nontenured professors. Tenure is primarily based on activities considered more scholarly than engaging in staff development in a school system. Fortunately, Boston University carefully considers such effort and the scholarship that results from it.

Third, there was evidence to disprove the generalization that veteran teachers are too difficult to reach and that the reform movement will be hobbled by a combination of the elimination of positions of the youngest teachers during times of fiscal duress and the presence of more veteran teachers who are not as open to change. Fourth, an extremely heartening event took place in early July 1991. The teacher-as-trainer model had worked. Several of Chelsea's elementary teachers who were involved in the study and teaching of the science objectives helped to conduct a summer workshop for other interested teachers. More than 40 teachers attended this 2-day workshop. This is even more impressive when it is understood that all of the teachers were told on June 14 that their positions had been eliminated because the city demanded that \$4.3 million be reduced from the \$15.9 million budget for the next school year.

Finally, the same model of change has already been applied in the area of early childhood education. Within 2 months, Professor Judy Schickedanz was able to develop guidelines for

teaching students ages 3 and 4. She conducted a workshop in August 1991. The same model will also be used to develop teaching objectives for grades 9-12.

A second obstacle encountered by the university centered around parent involvement. Encouraging parent involvement in urban school settings is extremely frustrating for most teachers and administrators. In Chelsea, we found a typical situation. Very few parents were visible on committees or at their child's school conferences. Without much optimism, the schools dutifully sent out notices of events for parents in four languages. The costs were high and the return on the investment was low. The bilingual parent advisory committees (PACs) were small and not active. The special education PAC was very active and attentive. Many parents did not participate because of their belief in the authority of the teacher and the school, because of a negative experience in their own school lives, because of an unmet need for babysitters and transportation to attend activities, because many parents are not legally in Chelsea, and because of more dramatic reasons, such as refugees from Cambodia who still remembered Pol Pot's regime encouraging the arrest or even killing of all those in authority—including teachers. Even hard-working veteran teachers in Chelsea had given up. It was "well known" that the parents either didn't care or were unreachable.

The Boston University team, in conjunction with then Superintendent of Schools Diana Lam, various parents' groups, and the Chelsea School Committee, decided to overcome this recurring problem in two ways. One approach was to continue to seek more productive ways to involve parents in their schools. Not only were flyers in four languages sent home, but a Parent Information Center was established and in-service activities for teachers related to the various cultures were introduced. School health clinics were designed for both medical purposes (ensuring that students are ready to learn) and as possible attractions for families to enter the schools. There was a major enhancement of the K-12 instrumental and choral music programs, to attract parents to see their children perform, and the distribution of an extremely helpful Massachusetts State Department of Education manual with 50 ideas to involve parents. Individual school as well as systemwide report cards are being developed.

But it was the second approach to parent involvement that interested us even more. Our basic assumption was that parent involvement should be focused more on what parents could do at home than what they should be doing at the schools. We had listened to teachers and administrators deplore the lack of reinforcement of school day activities in the home. A series of successful programs and activities showed the university and Chelsea that parents were willing, but needed assistance. Parents who themselves were deeply involved in education in order to improve their job opportunities and who were asked by the school to provide supplemental learning activities for their children could contribute to their children's success at school.

One activity was the Intergenerational Literacy Project. This is a 3-year project funded primarily by the U.S. Department of Education's Fund for the Improvement and Reform of Schools and Teaching, with additional funds from the Xerox Corporation and the Massachusetts State Department of Education. The project is best described as an opportunity for parents and other family members, including grandparents, to attend sessions 3 to 4 days a week to improve their reading and writing and to help their children become better readers and writers. Almost 56 percent of adults in Chelsea have not received a high school diploma and more than 50 percent of children in third grade are performing significantly below grade level, "revealing a substantial incidence of reading disability among children" (Paratore 1990).

The program is directed by Boston University professor Dr. Jeanne Paratore and the Chelsea Chapter 1 specialist, Janis Rennie. They report that the plan is based on "recent research that supports a strong link between the home environment and children's reading achievement. Specifically, home practices such as shared reading and reading aloud, making a variety of print materials available, and promoting positive attitudes toward literacy, have been identified as having a significant impact on children's literacy learning. . . . The program seeks to . . . provide parents with literacy instruction aimed at both improving their ability to use literacy in ways that will enrich their own lives, and, at the same time, share ideas and suggestions for reading and writing with their children as one way of preparing them for success in school."

The classes are held during the day at the local Salvation Army building, in the evening at the Chelsea Public Library, and during the summer at one of the local schools. Parents also have the opportunity to leave their children (infants to age 4—as many as 43 children in a single day) in adjoining classrooms with university undergraduate and graduate students who care for them and provide academic activities. An advisory group that involved representatives from the local social service agencies reshaped the initial ideas and helped formulate a greatly improved plan. For example, as a result of the group's input, the separate classes for parenting teens were discontinued and a staff liaison was designated to existing parenting teen programs. As of June 1991, hundreds of Hispanic and Southeast Asian mothers, fathers, grandmothers, aunts, uncles, and parenting teen mothers had graduated from the project.

A second activity directed toward involving parents at home in their children's education was the development of the High Technology Home Learning Project. The partnership was concerned that community day care programs already had insufficient openings and that grim fiscal conditions were leading to cuts in State funding for day care. Meanwhile, one of the major tenets of the partnership was that aggressive attention to children in the early years, as well as to their parents, would pay dividends later. The High Technology Home Learning Project is in its first year of operation and, as far as we know, is the first computer-linked family day care program in the United States. Six family day care providers are linked by computer to the Boston University School of Education, the Chelsea Public Schools, the Chelsea Massachusetts General Hospital Health Center, and Chelsea child care agencies. The program is funded by IBM. Beginning in the winter of 1990, the 6 providers and 14 other early childhood educators in the community completed a 12-week training course in preschool education. All of these educators will continue to communicate and receive support via computer and additional training sessions.

The third activity to involve parents at home was an offshoot of HIPPY, a program that was borrowed from Israel. Renamed CHIP (Chelsea Home Instruction Program), this program is funded from Chapter 1 funds. These funds support learning tool kits (e.g., crayons, paper) and daily lesson sheets in the basic subjects for parents' use. In addition, home visitors help the parents teach their children from the daily lesson sheets. In 1990-91, 60 parents took advantage of this opportunity; in 1991-92, the program will be expanded to 120 parents.

These three activities have drawn parents' interest in the education of their children in ways that flyers, even in four languages, could not. The ultimate goal of these activities is to ensure that every child enters the first grade with grade-level skills. Too often, children enter the first grade behind and never catch up. Remedial work is required for many years, causing frustration for the student and the teachers.

The Boston University/Chelsea partnership approached the two obstacles discussed here with creativity and courage. All of the programs mentioned were funded by a combination of sources, including Boston University, the private sector, and, in some cases, the U.S. Department of Education, demonstrating the potential of such collaboration. The two obstacles involved goals that were fundamental to the partnership. One goal was to use the expertise of people and research and to expedite needed programs, even if there was an element of top-down management. The second goal was to involve parents in the home, not just at the schools, and thereby enhance the chances that all of Chelsea's children would have an even start. Although it is still too early to assess how the partnership addressed the two obstacles, the initial signals are positive in terms of the attitudes of teachers and administrators, the numbers of parents involved in education in the home, and the data collected by the programs (e.g., the Intergenerational Literacy Project maintains records of what books are read in the home and how often). These initial successes have convinced us all that, so far, things look positive for the Boston University/Chelsea Partnership.

RESTRUCTURING CATEGORICAL PROGRAMS FOR LOW-PERFORMING AND HANDICAPPED STUDENTS

Stephen Fink, Executive Director
Student Services Division, Edmonds (WA) Public Schools

Stephen Fink describes a model of improving the achievement of low-performing and handicapped students that centers on changing the entire school structure.

In discarding the traditional remediation model of instructing students with special needs, Edmonds schools have undertaken a process of restructuring categorical programs whereby all schools are encouraged to group and serve students according to their instructional needs, not their labels and funding sources.

INTRODUCTION

The Edmonds School District is located north of Seattle, WA. The district has approximately 19,000 students in 22 elementary schools, 4 middle schools, 4 high schools, and an alternative high school. The district began restructuring categorical programs for low-performing and handicapped students six years ago.

Before restructuring categorical programs, schools in the Edmonds School District were using a traditional remediation model to serve handicapped and low-performing students. The "traditional remediation model," which is still the norm in public schools across the country, typically involves a variety of categorical programs, such as special education, Chapter 1, and English as a second language. These categorical programs are usually administered by different departments, with different eligibility requirements, and different program design. The programs generally operate external to the actual school site in that the individual school staff are typically not involved in the program design. In fact, the various categorical programs have institutionalized to the point where they have their own professional associations, journals, and conferences, all of which serve to remove the categorical programs from the basic education system.

The traditional remediation model is predicated on a concept of "wait, label, and segregate." Students enter the basic education system and only after they experience failure to a predefined level (the "wait" part of the concept) can they access categorical program support. After the students have experienced failure, they must be formally "labeled" to qualify for a respective categorical program. Once the students have been labeled, the typical service delivery model is a segregated classroom, often called "pull-out" or "self-contained."

In addition to an emerging body of research and literature that questions the tenets of the traditional remediation model, there are also serious equity issues associated with the model. The first equity issue is the establishment of parallel tracks. This is particularly true of special education, where low-performing students are often given a label such as "learning disabled" or "educationally handicapped," put on a special education track, and kept there throughout their public education experience. Once a student receives a special education label, there is a high likelihood that this student will carry that label until he or she graduates or drops out of school. The research on tracking leaves no doubt that this practice is not in the best interest of students.

In addition to the tracking issue, the traditional remediation model is based on a normal curve concept, which also raises serious equity concerns. The normal or bell-shaped curve is really a statistician's tool that presumably suggests that intelligence is distributed along a bell-shaped curve with the average population falling into the center of the curve. Given recent research into multiple intelligences, one can dispute the notion of the normal-shaped curve for intelligence. Aside from this, the normal curve concept is an insidious part of the traditional remediation model. Teachers who have been inculcated with the notion of the normal curve for intelligence assume that learning will also fall along the same curve. This means that there will always be a certain degree of student failure and that teachers will accept that failure as a natural phenomenon of the normal-shaped curve.

Once students experience failure, they are often referred for categorical program services. Teams of specialists—psychologists, special education and/or Chapter 1 teachers, etc.—convene to determine "what's wrong with the student," as if the child has some innate disability. Once that disability can be identified, the student can qualify for a categorical program and receive remediation. Without going into a long discussion of the research, the bottom line is that remediation does not work. The entire concept of categorical programs is ill-founded in that support is held back until students fail, rather than used up front in a prevention model.

As a result of equity concerns, as well as ample research that raises serious questions about the traditional remediation model, the Edmonds School District embarked upon a process of restructuring categorical programs.

PURPOSE, SCOPE, AND GOALS

The major project goal was to develop and implement an integrated special, compensatory, and basic education service delivery model that provides for effective instruction for all students within the basic education system. This means that all of the categorical resources must be blended and made available to the schools for "prevention" purposes. This approach does involve certain obstacles, which will be discussed later.

Given the district's philosophy that positive organizational change is most likely to occur if it is initiated and supported at the building level, the scope of this project involves supporting individual schools in school-centered decisionmaking with regard to their entire educational program. Typically, school-centered decisionmaking is greatly constrained with respect to the categorical programs. It's the District's philosophy that in order to improve the performance of low-performing and handicapped students, individual schools must be empowered to make

changes to their total educational program. The role of the central office leadership, therefore, is to create conditions for change, rather than to emphasize preconceived outcomes.

In order to support and facilitate this change process, the district-level leadership engaged in several different functions. The first function was to position all of the categorical programs and resources in a way that individual schools could experiment with virtually any program design without worrying about restrictive rules and regulations. Schools are encouraged to think "outside the box," and the role of the central office leadership is to find a way to make it happen, rather than to say no. All schools are encouraged to group and serve students according to their instructional needs, not their labels and funding sources.

In addition to positioning the categorical programs in a way that supports rather than hinders school-based reform, the district also provides funding and a facilitator to support schools in a comprehensive change process. (This change process will be discussed briefly in the next section.) In terms of the overall purpose and scope of the project, the important point here is that the district does not have any preconceived outcome other than that all students will learn and achieve at a high level of mastery. How a school organizes itself, the curriculum, resources, etc., are the decisions of that school. Consequently, out of 31 schools, there are 31 different program models, although there are many similarities among schools.

BUILDING CONSENSUS FOR CHANGE

The process used to initiate change in the buildings involves the establishment of a building leadership team. This team must be of sufficient size and scope to create the "critical mass" necessary for fundamental change. Without going into all of the details of the change process, the basic premise is to create a vision around what the school is trying to accomplish. This vision is an outgrowth of the school staff's examination of what they believe about the role and purpose of school, what they want students to learn and achieve, what they know about how and why students learn, and, finally, what they will do to ensure that all students learn. By working through this examination with both the leadership team and ultimately the entire staff, consensus can be reached about how the school will be organized to ensure that all students will learn.

Because this process requires great time and staff energy, schools are encouraged to take a full school year for planning before implementing program change. The district provides funding for the planning year, along with funding to a lesser degree during the implementation years. Initially, the intent was to fund schools for a period of 3 years (1 planning year plus 2 implementation years), but it's apparent that, to sustain the consensus for change, a long-term commitment must be made. The district now funds all of the schools to some degree on an ongoing basis. It is clear that one of the most important variables in building and sustaining consensus is quality planning time for the staff.

MAJOR OBSTACLES

Because the main purpose of this project is to improve the achievement of low-performing and handicapped students by focusing on the entire school, a major obstacle has been the rules

and regulations of categorical programs. The notion of targeted funds is not detrimental in and of itself, but use of the funds is laden with a bureaucracy of regulations that tend to curb creative thinking. From the federal to state level, there is an infrastructure supporting each categorical program that has served to isolate and institutionalize these programs, resulting in intrusive and counterproductive regulations at the school level.

The Edmonds School District has not received any special waivers for program regulations. In order to support schools in their creative deployment of categorical resources, the district "blends" federal, state, and local dollars according to the program needs at each school. This blending to meet Federal time and effort standards is highly labor intensive and is contradictory to improving education for students. Nevertheless, the district's belief in school-centered decisionmaking and reform is strong enough that the necessary program blending and tracking of funds is done to support individual school efforts.

One of the promising outgrowths of the district's involvement with this project has been the development of legislation at the State level that allows the district to receive funding for learning-disabled students without having to formally identify and label the students as special education. The need for this legislation points out a major obstacle, in that special education funding is most often determined based upon how many identified students are enrolled according to a variety of handicapping conditions. With particular respect to the mild handicaps such as learning disabilities, the actual handicapping label has little or no relationship to what is needed in terms of curriculum and instruction. In that case, the only reason students are being labeled and tracked in special education is to receive funding. The district has taken a strong leadership role in the State of Washington to examine and change this regressive funding formula.

In addition to categorical program regulations and funding formulas, there are process obstacles to overcome. Planning time was briefly mentioned as an obstacle. There is no question that schools must find a way to put the same kind of time into research and development as does the private sector if systemic change is to occur. Basic education funding must also change from a time-driven to an outcome-driven model. The amount of time, courses, credits, and clock hours have no relationship to the quality of student learning. Schools need to be funded in a way that allows great flexibility in the school schedule while holding schools accountable for basic student outcomes.

TRAINING REQUIREMENTS

Training requirements for school-centered decisionmaking fall into process and content categories. The content training requirements vary from school to school but are generally easier to provide than process training. Because each school in the change process arrived at different decisions regarding structure, curriculum, and instruction, training needs varied accordingly. For schools that have adopted an outcome-based instructional model, considerable training is necessary to help teachers develop instructional outcomes for various subjects. Initial training at several schools was up to 2 full weeks prior to implementing the outcome-based model. Content-based training, such as cooperative learning, mastery learning, and control theory/reality therapy, varies according to the complexity of each approach.

With respect to low-performing and handicapped students in particular, research shows that many teachers perceive themselves as lacking the necessary skills to work with these students. In that regard, ongoing training needs exist even after changes are made to the instructional model. Although it is difficult to quantify the time and cost of the training requirements, it is something that must be attended to in the change process.

Our experience with group process skill requirements indicates a great need for training in this area. One critical common denominator to all successful change processes is the group process skills of the school principal or leader. Someone must be the "keeper of the vision" and have the necessary process skills to lead staff toward that vision in a forum of shared decisionmaking and consensus building. These skills appear, in our experience, to be even more important than the traditional curriculum and instruction knowledge required for school principals. While these skills are absolutely essential to the successful change process, they are more difficult to foster than typical content skills. There are a variety of pre-service and in-service leadership programs that address group process skills, but for the most part, that focus has been lacking in most administrative preparation programs.

MECHANISMS FOR FEEDBACK

Because the central focus of this project is site-based change, mechanisms for feedback vary from school to school. Most schools have a formal school improvement leadership team made up of staff and community members. Some of the schools have actually incorporated the categorical program restructuring into the school improvement process, in which case feedback from both staff and community is more formalized.

Schools that use a different leadership team for restructuring their categorical programs have experimented with different avenues for feedback. Some schools have used formal surveys of students, teachers, and parents to obtain feedback. The district has supported schools with a more comprehensive teacher survey. Schools have also used a variety of climate surveys and school profiling techniques to examine different aspects of their programs. The degree to which schools formalized avenues of feedback and actually incorporated that feedback into the change process seems dependent, once again, on the process skills of the school principals. Principals who truly understand and value group process develop and utilize strategies for obtaining continuous feedback. Consequently, in an environment of school-centered decisionmaking, the degree of student, teacher, and parent satisfaction is different from school to school. From a district perspective, the important point is to continue "steering a true course" by having high expectations for all students and supporting all schools in their development to meet those expectations.

PROGRAM EVALUATION

As schools continue to develop alternative methods of assessment, such as performance-based and portfolio assessment, the basic measure of student achievement has still been group-administered standardized achievement tests. The district administers annual achievement tests for all students grades 1-8. In addition, state-mandated testing occurs at 4th, 8th, and 10th grades.

With respect to the categorical program restructuring, the group achievement test scores are used to provide a longitudinal look at student achievement. The evaluation documents progress for targeted students, although the exact variables responsible for the progress have been difficult to isolate. Each year, through a task force of district staff, additional variables are added to the evaluation. The district is currently tracking nine different service delivery models (grouping strategies), instructional time, and the service provider for each subject served. Although there appear to be several variables emerging as potentially high correlates for student achievement, more years of data need to be gathered to make any definitive judgments. In addition, new variables need to be added to the evaluation, such as types of instructional approaches and curriculum. The bottom line in the program evaluation is that targeted students are demonstrating progress compared to that of their non targeted counterparts, which demonstrates the efficacy of integrating students rather than separating them according to which program they happen to qualify for.

Although the standardized test approach has its drawbacks, it has provided a comparative data base for examination. The district is also highly involved in pursuing alternative methods of assessment, which we hope to utilize over the next several years.

WHAT WE ARE LEARNING

Six years of restructuring efforts have served to reinforce the value of school-centered decisionmaking. From our experience, there is no question that fundamental school reform is most likely to occur if the building staff is empowered to make the major decisions affecting their school. As mentioned previously, the quality of the group process is the key to successful school reform. To assist buildings in the process of shared decisionmaking, district staff have developed parameters for "ideal decisionmaking." This document is in constant draft form as an indicator that there is always room to improve the decisionmaking process.

An important distinction needs to be made between restructuring service delivery and school improvement. In some schools, several teachers have teamed up to change the way they serve students. For example, a special education teacher who once taught a self-contained classroom may team with another basic education teacher to integrate students. Although there is nothing wrong with this, and in fact we want to encourage this type of experimentation, this service delivery change is not synonymous with a total school improvement effort.

School improvement is much broader in scope and involves the total school staff, structure, curriculum, and instructional methodology. Restructuring categorical programs is a subset of changing the entire school structure, particularly that structure that precipitated student failure in the first place. School improvement focuses on values, beliefs, attitudes, and culture of the school. This is a much larger task than simply changing the way teachers may group low-performing or handicapped students.

After 6 years, we have learned that there is no one effective model to replicate from site to site. Each school differs in its student and community needs, staff strengths and weaknesses. Rather than searching for an ideal model, schools need to choose the research-based components that fit their unique school needs. This means that part of an effective group process involves

much discussion about what we know or, in other words, what research tells us about how students learn.

Finally, we have learned that change requires a minimum of a 5-year focus and, in reality, needs to be supported every year beyond the first 5. Fundamental school reform requires a change in the school culture that often affects individual identities. Secondary teachers who may have only identified with a subject-based department need to develop new identities as schools move into interdisciplinary approaches. Special education teachers who may have only identified with an external group of resource teachers need to develop new identities as schools do away with special education tracks. This change in identity is not easy. It requires time, nurturing, and skilled group processing. It requires a passionate commitment to a new vision that all students really can learn. This does not happen overnight, although, with a strong organizational mission and alignment around the organizational beliefs and values, change will occur. The ultimate charge for the district-level leadership is to create the optimal conditions for this change to occur in the most expeditious manner possible.

THE TEN SCHOOLS PROGRAM

A COMPREHENSIVE INTERVENTION FOR CHILDREN OF COLOR

LOS ANGELES UNIFIED SCHOOL DISTRICT

Melba F. Coleman, Associate Professor
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Melba Coleman, former principal at 102nd Street School in Los Angeles, describes the implementation of the Ten Schools Program, an instructional and organizational strategy to improve student achievement in 10 predominantly black elementary schools. Coleman provides an insider's view of what worked and what didn't work. She advises innovators to limit the number of new tasks they take on, provide adequate staff training, obtain both official and community support, and provide adequate startup time. "New programs should be treated like a relay race rather than a 50-yard dash."

INTRODUCTION

The Ten Schools Program was developed in the Los Angeles Unified School District (LAUSD) as a way to reform education through restructuring. It was implemented at selected elementary schools as a pilot instructional and organizational program designed to prove that all children can achieve to their highest potential when the conditions for learning are optimal. The program was initiated in 10 schools that had a record of low achievement and an African-American enrollment greater than 60 percent. Ten comparison schools with similar achievement problems and demographics were also selected.

PROGRAM GOALS AND OBJECTIVES

The goal of the Ten Schools Program is to provide

administrative leadership, dedicated teaching staff, and an instructional and organizational plan that will reverse the pattern of poor academic achievement in predominantly black (60 percent or more) inner city schools and, as a result, significantly improve academic achievement and performance for black students as well as other minority and non-minority students at those schools so that each child will be able to attain his/her academic potential.

The stated objective of the program is "to raise the median student achievement at each grade level in reading, mathematics, and language scores at each school site to the 50th percentile

or higher within five years for those students who attended school for five years, as measured by the Comprehensive Test of Basic Skills (CTBS)." Interim objectives for average achievement of children in regular attendance are as follows: Year 1, 25th percentile; Year 2, 30th percentile; Year 3, 40th percentile; Year 4, 45th percentile; Year 5, 50th percentile.

PROGRAM FUNDING

To achieve the desired flexibility in program funding, the board of education authorized a new method of allocating funds. Monies from Chapter 1, School Improvement, and the district's integration budget that would have been appropriated to each of the 10 schools individually were instead combined and appropriated to these schools based on 1986-87 enrollment; \$3 million came from Chapter 1 and \$2.8 million came from the district.

Funds were allocated to each school to provide a 20:1 student/teacher ratio in grades K-2; a year-round schedule for the school principal and office manager; an extended school year (199 days, including a summer session); 14 days of staff development for teachers; an after-school tutorial program; Saturday educational clinics; a full-time elementary library aide; educational aides or assistants for each teacher; a full-time psychologist; campus security aides (each aide serves two schools); field trips; a full-time school attendance and adjustment counselor; a full-time nurse; an instructional coordinator; a bilingual coordinator; community liaisons; youth relations assistants; a language readiness program for prekindergarten students; Project AHEAD (Accelerating Home Education and Development); and project PICA (Parents Involved in Community Action).

The program was expected to be implemented with the same amount of money that had been allocated to these schools in the past, but costs exceeded projections. One of the largest expenses was lowering the pupil-teacher ratio in grades K-2, which generated from three to nine additional teaching positions at each school. Other unexpected expenses included the program director's salary, the addition of full-time bilingual office assistants, and increasing each school's discretionary funds from \$25 per student to \$125 per student.

STAFFING

To obtain the most qualified, experienced principals for the 10 schools, an application/assessment process was established, focusing on experience and leadership ability. Five principals were selected through this process; five others were asked to apply and agreed to serve. Seven of the schools received new principals; three continued with the same principal who had served the previous year. Four schools also received assistant principals because of high enrollment.

The next step was to select teachers and other staff members. Principals used committees composed of support staff, parents, and mentor teachers to select their staffs. Some principals chose to use the committee to interview all staff members, including clerical, custodial, cafeteria, and paraprofessional, while others selected only teachers with this method. All teachers had to apply for their positions.

Initially, there was no director for the program. Two lead principals were elected by their peers to serve as liaisons to top-level administrators. However, this system was not effective in meeting the needs of the principals and their schools. In April 1988, at the request of the principals, the board of education appointed a director to supervise the instructional and operational aspects of the Ten Schools Program. The director was selected based on her successful accomplishments as a principal and as a director of instruction for one of the district's eight regions.

TIME FRAME FOR IMPLEMENTATION

The idea for the Ten Schools Program was born in the spring of 1986, when an evaluation report found that, despite more than 20 years of compensatory education, students in these schools continued to score at the bottom on standardized tests—the Comprehensive Test of Basic Skills (CTBS) and the California Assessment Program (CAP) tests. Impetus for the program came from a concept paper prepared by the district and from recommendations from a group of African-American community leaders. From idea to implementation took just over a year. Because of political considerations, however, principals were not selected until June 1987—less than 1 month before the program began. This created a serious time crunch for the seven new principals. The three principals who were continuing in their schools did not feel as hurried and harried as did the other seven. Despite tremendous odds, the program began on time. Principals asked that the first year be designated as a planning year rather than an implementation year, although this still has not been decided.

TRAINING

Training for teachers began immediately. Before the children came to school in August 1987, teachers received 3 weeks of staff development. This early training was not as focused as it should have been: the project was new, the time line was short, and there was no director for the project. The assistant superintendent of instruction assumed the task of organizing and directing the Ten Schools Program in addition to her other duties. Principals were busy simultaneously closing their old schools and opening their new schools. Although that first summer of staff development was not very effective, it was still significant because teachers were paid their regular salaries and they were free of responsibility for instructing students during the training. This has continued to be a major benefit that teachers have derived from the Ten Schools Program.

In the ensuing years, staff development has focused on the strategies needed to implement program components, whenever possible using outstanding teachers from the 10 schools to conduct staff development for their peers. This strategy not only strengthens the staff development program, but also provides recognition for the teachers involved. A master's degree program through California State University has been developed to train a cadre of teachers to conduct staff development for the Ten Schools Program. This goal has been only partially realized.

Training for principals was woefully lacking. Not until Year 3 did the director and the principals receive any professional development, as a result of the adoption of the Ten Schools Program by the Center for Educational Programs in New York, a Milken Family Foundation

project. Even then, the sessions were few and limited in scope. Lack of professional development for administrators meant that they had to depend on their own resources. They shared many ideas in their monthly meetings; however, this informal networking in no way took the place of planned, organized, expert professional development.

Not only are pre-service and in-service training essential for principals, but replacement principals should be trained in a timely manner. Principals who serve as change agents often burn the candle at both ends: their work load increases so much in amount and intensity that sustaining the pace over a long period is often impossible. Six principals have been replaced for various reasons during the program's 4 years. In 1991 (Year 4 of the program), four principals left—one retired, one moved, one was promoted within the LAUSD, and one went to the university level.

New programs should be treated like a relay race rather than a 50-yard dash; replacement personnel should be trained so that they are running at top speed when the baton is handed off to them. Because new programs are dependent on the success, motivation, and drive of the leaders, many programs fail when their charismatic leaders move on. If educational restructuring is to take root, close attention must be paid to the care and nurturing of leaders. It should not be assumed that they will continue to be self-renewing and self-sustaining.

INSTRUCTIONAL COMPONENTS

The plan was to provide an intensive scholastic program focusing on language development, with a research-based instructional plan so that students would achieve mastery of the district's curriculum at each grade level. Components of the plan include conducting a needs assessment for the school as a whole and one for each student; preparing a list of expectations for students, for teachers, for other staff, and for parents; developing long-range social and academic objectives; examining grouping practices for the school and for classes; fostering cooperative teaching and learning strategies; and conducting ongoing evaluation and monitoring activities.

The program focuses on the following instructional areas:

- language development—listening, speaking, writing and reading, including—
 - for all students, 30 to 45 minutes daily devoted to the development of oral language skills;
 - for primary students, Writing-to-Read Lab programs donated by the Riordan Foundation;
 - for African-American students, a focus on standard English through programs such as Proficiency in English; and
 - for Limited English Proficient students, the use of Sheltered English to teach content in social studies, science, and mathematics; a bilingual advisor to assist teachers and aides;

- integrated learning, in which skills are taught across content areas—literature, science, mathematics, social studies, music, and art;
- problem solving, taught through critical thinking and cooperative learning;
- social skills, taught through cooperative learning; and
- self-esteem/self-development via the Efficacy Program, a partnership with the Pacific Telesis Foundation.

FEEDBACK MECHANISMS

Feedback mechanisms include:

- School Effectiveness Team Visits: Teams composed of administrators, teachers, support staff, and parents visit the schools twice a year and rate them according to a locally devised instrument. Results are shared with the school administrative and support staff at an exit meeting. Schools use feedback from these visits to target their instructional weaknesses and make improvements.
- Parent Involvement Program: A parent outreach program (Project AHEAD) and a parent education program (PICA) operate at each of the 10 schools. Both programs provide parents the opportunity to communicate their needs to the schools and to keep abreast of school information. During Year 4 of the program, the Quality Education Program (QEP) was piloted in four of the schools. QEP's goal is to strengthen home-school communication, improve reading skills via parent involvement, and decrease television viewing time.
- Community Liaisons: Each school has a liaison who serves as a link between the school and the community. This person's duties include communicating the viewpoint of the school to the community and vice versa, promoting public relations about the school and the Ten Schools Program, planning and participating in parent growth activities, and assisting PICA and Project AHEAD.
- Parent Conferences: A yearly Ten Schools Program parent conference is held, featuring workshops and seminars. The community liaisons, the program director, and Projects PICA and AHEAD work together to make this conference meaningful for the participants. The conference is also an opportunity for parents to provide feedback on the program. Both English and Spanish activities are provided.
- Ten Schools Program Leadership Council: This council is composed of the principal and two teacher representatives from each of the 10 schools. The Ten Schools program director meets with this council monthly to make program decisions.

In addition to the above activities, each school uses parent councils and shared decisionmaking councils to elicit feedback from parents and staff. Additional strategies are used to involve teachers in the decisionmaking process at the local school level. At 102nd Street School, for example, a committee system is in place through which every teacher serves on one major committee (such as discipline or guidance) in addition to performing one adjunct assignment. This school also has weekly meetings for each grade level to share strategies and provide input on school problems.

Feedback gained from these and other sources is used to improve the overall program and each individual school. Feedback is welcomed and encouraged because the program is perceived as innovative and creative—one in which mistakes are tolerated and successes are celebrated.

ASSESSING STUDENT PROGRESS

Student achievement has been improving since the first year of the Ten Schools Program, although it has not been consistent with the interim goals that were outlined in the evaluation design. Students in the Ten Schools Program have consistently outperformed students in comparison schools on the CTBS each year of the program. Ten Schools Program evaluation documents (1989) report the following findings:

- The overall improvement in reading achievement scores for students in the Ten Schools Program who attended the same school for 2 consecutive years was 3 percentile points. During the same period, students in the comparison schools who attended the same school for 2 consecutive years lost 9 percentile points overall in reading.
- The overall improvement in mathematics achievement scores for students in the Ten Schools Program who attended the same school for 2 consecutive years was 17 points. During the same period, students in the comparison schools who attended the same school for 2 consecutive years lost 1 percentile point overall in mathematics.

It is important to note that these figures are based on students who remained at the schools over time. High transiency rates are a problem in most inner-city schools; the 10 schools in the program are no exception.

Another example of improved student achievement is that 8 of the 10 schools received Chapter 1 incentive grants in 1991. Awards were based on established criteria, including increases in the number of students scoring above the 30th percentile in reading, mathematics, and language on the CTBS. CAP scores were also considered. Two years in a row, 102nd Street School was awarded grants of \$44,000 and \$48,300, respectively, for improving student achievement. The school was among only 13 out of 274 schools that attained all of its improvement goals.

The evaluation design for the Ten Schools Program includes a multimethod/multiphase approach. Methods include analysis of normative test data, assessment of student attitudes, and case studies compiled by program documenters based on interviews, questionnaires, and

observation data. Evaluation includes planning, formative, and summative phases. Evaluation is supervised and conducted jointly by UCLA and the Program Evaluation and Assessment Branch of LAUSD.

INITIAL SUPPORT FOR THE TEN SCHOOLS PROGRAM

The Ten Schools Program initially had the support of the district and the community. At the district level, support came from one board of education member (whose reelection ensured the implementation of the program in July 1987) and three sympathetic colleagues, from the superintendent, and from several assistant and associate superintendents. Community support came from organizations such as the National Association for the Advancement of Colored People, the Southern Christian Leadership Conference, and the Council of Black Administrators, and from various community activists.

Although the consensus remained that the program should be maintained, the initial fervent support subsided. Several factors seemed to have influenced this change. First, the district changed superintendents. Second, the cost of operating the program rose considerably, at a time when the board of education was increasingly concerned with other programs as well as other budgetary matters. Finally, the community groups and individual activists showed less interest; they did not pursue issues, nor did they follow up on the program as conscientiously as they had in the beginning.

MAJOR OBSTACLES

The Ten Schools Program had to overcome many serious obstacles:

- Lack of continuing support from the district and the community. Initial community support had come for the most part from career activists from the larger community, not grassroots activists from the school communities involved. District officials initially came to visit and offer support, but that tapered off during the first year.
- Initial failure to assign coordinators to the program because it was felt that, with a pupil/teacher ratio of 20:1, teachers could handle all of their instructional needs—both for English-speaking and Spanish-speaking students.
- A rapid increase in the Latino population in each of the 10 schools, along with a decline in the African-American population. This change shifted the focus to providing more bilingual instruction, but few bilingual teachers were available.
- Lack of in-depth pre-service and in-service training for administrators.
- No cadre of trained replacement administrators to take the place of those leaving the program.

- Some promises not kept, such as mentor teachers and additional compensation for principals.
- Too many demands from too many people to try out too many programs, products, and ideas.
- TIME—the major obstacle in the initial implementation of the program. Seven principals were closing down their old schools while simultaneously opening new schools. In my own case, the old school was more than 30 miles from the new school. There was no time to train principals. Staff interviews and staff development activities were going on daily.
- Staffing, which continues to be a major problem. Compromises were made in appointing principals: not all of those appointed met all of the selection criteria. When teachers were selected, OCR guidelines dictated that the number of minority teachers could not exceed 64 percent. This meant that many of the teachers who were hired were inexperienced or emergency credentialed, some had never been in a classroom. Another critical and continuing staffing problem is the lack of effective methods for removing marginal or ineffective teachers and other staff who are entrenched because they have seniority.
- Staff development for teachers, which was not always on the mark, especially in the beginning. However, it grew stronger and more focused as the program progressed and as teachers became more conversant with instructional strategies and techniques.
- Parent involvement and participation, which was not as strong as anticipated. Although parent support grew steadily over the years, parents did not participate and become involved in most of the schools.
- The 1989 teacher strike, which did not help staff cohesiveness. It took almost the entire third year of the program to overcome some of the effects of the strike.
- Initial failure to include the visual and performing arts as a component of the program. They were not added in a substantial form until Year 3 of the program.

RECOMMENDATIONS FROM A PRACTITIONER

Based on my 4 years of experience as one of the lead principals in the Ten Schools Program (102nd Street School), I have come to some conclusions about what seemed to work.

1. Schools need autonomy to create and implement innovative solutions to unique problems faced by their students and communities. Although all of the schools were located in the inner city, 102nd Street and three others were adjacent to public housing projects. These communities face the most severe problems of the inner city—poverty, high crime rates, drug epidemics, and rampant gang activity.

At 102nd Street, our students are exposed to death and dying on a daily basis. Often students are grieving as a result of the deaths of friends and family members. To address this critical need, we created and implemented a Grief and Loss Counseling Program for these children. This program seeks to administer to the hearts of the students while still attending to the needs of their heads. This is just one example of what can happen when schools have creative people with the freedom to respond to the needs of the students.

2. Class size does matter. In the Ten Schools Program, the teacher/pupil ratio in grades K-2 is 20:1. Despite some research that says that class size does not make a difference, it has made a definite difference in the schools in the Ten Schools Program. For children who are poor, minority, and who live in dysfunctional families in low socioeconomic communities, **SMALLER IS BETTER**. Many of these children do not receive the nurturing or support that they need to thrive; school is the only place where many of them can get this kind of care. They come to school with severe psychological, emotional, and social problems that require a great deal of time and patience to address.

Most of the schools are large, with from 700 to 1,200 students. They are busy, noisy, bustling places all day long. In this setting, small classes are critical for children to receive the attention they need to improve academically.

In addition to having smaller classes, the school itself should be organized into smaller units, such as teams, grade levels, and committees. These smaller units foster a sense of togetherness and teamwork, where cooperative planning and collaboration are encouraged and expected.

3. Interagency collaboration is important. Schools alone cannot meet all of the needs of the children they serve. For example, 102nd Street School has a full-time nurse to serve its 1,100 students. The nurse, however, is overwhelmed because she is the primary health giver for most of the children. A child who steps on a piece of glass on Saturday might not receive any medical attention until seeing the school nurse on Monday. An onsite health clinic should be available for the students.

Examples of interagency collaboration at 102nd Street School are the Grief and Loss Counseling Program and the Infant-Toddler Drug Baby Program. These programs were created to address the acute needs of the students and the community. The need for this kind of collaborative approach is great.

4. "Top-down" and "bottom-up" cooperation are absolutely essential for successful restructuring. Change is a difficult process, at best. Without the support of those at the top, such as the board of education and the superintendent, funds cannot be allocated; institutionalized formulas, procedures, and policies cannot be waived; and support cannot not be garnered for a new program. No matter how creative, hardworking, and energetic the people at the bottom are, the program will not work without the support of those at the top, because the change will not be institutionalized. When those at the top give status and recognition to the new program, those at the bottom are perceived as innovators rather than

troublemakers. Conversely, unless there is "buy-in" from those who must implement the change, such as administrators and teachers, nothing happens.

5. The "university connection" is important for new programs to thrive. Dr. James Comer's program in New Haven, Connecticut, profited from his affiliation with Yale University. The Accelerated Schools Program in Oakland, California, is attached to Stanford University. Unless a program receives the backing of a respected institution of higher education, it is likely to be perceived as lacking expertise and credibility. The Ten Schools Program could have benefited from a university connection.
6. Although parents may support the program, it is difficult to obtain their involvement and participation. This appears to be true across socioeconomic lines, but it is especially true in large inner-city areas. Not only do many parents feel disenfranchised by the school (one more bureaucracy), but they don't perceive themselves as active participants in their children's education. There are a number of reasons why they prefer to leave education to the "professionals." In the Ten Schools Program, parents were actively recruited to play a major role in school programs. Project AHEAD, PICA, and Chapter 1 programs were designed to increase parent involvement in school programs and activities. Parents signed pledges at each of the schools stating that they would help children with homework, provide the necessary tools and a quiet place to do homework, and attend all parent conferences and meetings. Despite signing these pledges, parents did not participate in large numbers at any of the 10 schools.
7. Staffing is critical, and the principal is the key element in school reform. Principals must possess the administrative experience, instructional leadership, and personal and professional qualities that will make them the respected leaders of a new program.

Also, for a new program to work, administrators should have the opportunity to recruit new staff and to retrain and retain existing staff. Only people who believe in the new approach should be included. There should be a fair and equitable method of removing marginal or below-standard employees, who can sabotage the good work that other staff members are doing.
8. The number of goals, tasks, and programs that are incorporated into the new design should be limited. From its inception, the Ten Schools Program was bombarded by requests from vendors, entrepreneurs, and other well-meaning people to try their programs or products. Merchants and salespeople saw a golden opportunity to sell the "perfect program" to the Ten Schools Program. Change agents should be careful not to take on too much.
9. New programs should address both the cognitive and the affective domains. Students don't learn in a vacuum; they bring to school a whole spectrum of needs. Schools are perhaps the last major institution that socializes the young. Schools find themselves in the position of having to address not only the academic needs of their students, but the social, emotional, and psychological needs as well.

10. Adequate start-up time is important. To effect change, change agents need time and adequate training to make the new approach work. The experience of the principals in the Ten Schools Program validates this most emphatically.

The Ten Schools Program has made an impact on many lives. Not only have the lives of students, parents, and communities been enhanced, but also the lives of the educators involved. This program proves that massive changes can indeed take place, even in a huge urban school district such as Los Angeles.

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LEARNING LESSONS: THE PROCESS OF SCHOOL CHANGE

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Beverly Glenn concludes her examination of the process of school change with four general lessons: (1) teachers must be given the skills and knowledge to apply the successful strategies which researchers have developed, (2) the process of change is disconcerting and threatening to teachers, (3) the changing position of the nation in the global economy intensifies the need to improve the academic achievement of ALL children, especially black males, and (4) school reform will cost money.

CONTEXT OF THE PARTNERSHIP

Southeast Elementary School¹ is located in what Kenneth Clarke has called a "dark ghetto." Southeast's 480 children experienced the deaths of 33 parents and guardians over 18 months in the crack cocaine wars. Southeast is located in the neighborhood with the highest homicide rate in the District of Columbia, the city with the highest homicide rate in the Nation. The children are from poor and in-distress families. In May 1990, a 15-year-old was arrested leaving Southeast with an Uzi submachine gun. Gunfights are so common at night that children sleep on the floor under tables, in bathtubs, or behind boarded-up windows to dodge bullets. Some third and fourth graders can discuss weights and current prices of rocks of cocaine. The circumstances of many of their young lives are so poignant, the environment in which they live so traumatic, that the fact that they come to school at all is a testament to somebody's belief that education is the way to improve one's life chances.

At the end of July 1989, the president of the Southeast Elementary Parent Teacher Association (PTA) requested the assistance of the dean of the Howard University School of Education (HUSE). The problems described by the professionals at Southeast were so compelling that they could not be ignored. After determining that Southeast's principal would welcome the assistance, a meeting was scheduled with the superintendent of schools to gain his permission to intervene at Southeast.

Two hours after the meeting with the superintendent, the first meeting with the principal, counselor, several teachers, and the dean was held. One week later, 10 professors, a graduate student, and the dean met with teachers at Southeast to plan for academic excellence and a refocus on achievement. The president of the PTA, the principal, and several of the teachers talked about the desperate circumstances at the school. It was clear that something had to be done about the lack of student achievement and the apparent inability of the teachers to make a

¹The name of the elementary school has been changed to protect the privacy of our partner.

difference. At the time, however, we had no idea what the scope of the project would be, what would be involved, or what the goals were, other than the notion that HUSE would try to render long-term assistance to the parents, students, teachers, and principal of the school.

Southeast Elementary School provided a naturally occurring experiment, which, if properly handled, could lead to increased academic achievement, decreased teacher burn-out, and real learning. This was not the typical academic exercise of "study the problem then study it some more." The problems at Southeast were too real and too immediate for us merely to read and reflect. We intended to try everything—at once—for that is what the situation demanded. We met, planned, then acted.

INITIAL MEETING

At the initial meeting, several of the teachers expressed extreme hostility toward the university; they wanted to know what was "in it" for HUSE. The teachers believed that HUSE would not stick around long enough to help them. There were perceived social class differences that made the teachers at the elementary school uncomfortable. We explained that we did not envision a project or a program, but a long-term professional development opportunity for them and for HUSE students, which we hoped could help the children of Southeast. We explained that we hoped our graduate and undergraduate students would benefit from the practical experience.

We did not promise to raise academic achievement. We did agree to help the teachers do whatever they believed was necessary to improve student achievement. At this point, we promised that no thesis would be written about Southeast. However, we made it clear that if we developed a long-term relationship with the school, at some point, because we are a university, some of our students and faculty would begin to document their experiences and would probably want to publish their work. This seemed reasonable to the teachers; as one of them said, "We're not giving you money, so you should get something out of it."

DEFINING THE PROBLEM

The teachers believed that Southeast's fundamental problem was the children's lack of self-esteem. A fourth-grade teacher, for example, described the following situation, which she interpreted as evidence of a lack of self-esteem. Several boys, 9 to 10 years old, got up en masse, left the class, and went to the principal's office to announce that they were not going back because the teacher didn't like boys. To the HUSE dean, this did not appear to be evidence of a lack of self-esteem. In fact, as the teachers talked, it became clear that teacher morale and teacher expectations of the children were so low that working with teachers themselves would be the most effective way of focusing everyone's attention on academic achievement. In addition, the children first needed safety and security before they could begin to concentrate on the academic achievement that the dean believed the teachers wanted (although the teachers did not explicitly cite academic achievement—they wanted the students to sit down and pay attention).

The essential problem was this: How could we focus the attention of Southeast's teachers on achievement, regardless of the children's family backgrounds and despite all the distractions in their environment? Along the way, other issues had to be addressed and are still being

addressed. For example, how can we convince the children that schooling can be a legitimate avenue to a reasonably productive life, given all the counterexamples in the neighborhood? How can HUSE intervene systematically over time to help the principal make Southeast an effective school? How can HUSE be responsive to Southeast's parents in a way that is helpful? And how do we replicate what we have learned at other schools similar to Southeast Elementary?

WHAT HAS HAPPENED

Since August 1989, the dean of HUSE, more than 12 professors and many graduate and undergraduate students have worked at Southeast. All HUSE participants are volunteers. Participation by faculty and staff of HUSE is scheduled so that the elementary school will not be overwhelmed.

The list of interventions by HUSE is a long and varied one. Graduate students in psychoeducational studies conduct group, individual, and play therapy with the children. A center for counseling and career guidance, under the supervision of the school's counselor, has been set up. Workshops provided for the teachers have focused on effective schools and effective teaching, self-esteem, using black children's literature to improve reading achievement, early childhood topics, and the like. A charm club was started by an airline stewardess and a homework tutorial by Southeast's teachers. Materials were obtained that teach teachers how to interpret test scores and teach children how to take standardized tests. One professor is working with the most difficult group of boys. Another professor is helping a teacher to set up a horticultural environment in the basement of the school. Southeast's students have participated in a career exploration seminar at the university.

Southeast has computers that have never been wired for student use. HUSE graduate assistants are working on getting a computer laboratory operating.

One student, a 7-year-old orator, appeared on "Showtime at the Apollo," a nationally syndicated program, through the efforts of a HUSE graduate student. A professor from the Department of Television and Film at the university has started a camera club with more than 50 students. A cheerleading squad is run by a professor who has also done demonstration lessons with her undergraduates for the Southeast teachers. Another professor has done demonstrations in science for the Southeast teachers. These on-site professional development lessons are appreciated by Southeast teachers, who now complain that 2-hour stretches with the undergraduates are not long enough. On one Friday, 45 professors and students from HUSE were in the school at one time. There are only 27 teachers in the building!

Trust has grown slowly. It took more than a year for teachers to feel comfortable saying in planning meetings that they had some third graders who did not know their initial consonant sounds. Now the HUSE staff is trying to assist teachers in an after school homework project that the teachers initiated. The teachers believe that this program has been helpful to them.

Two coordinators, a professor of psychoeducational studies and the associate dean of HUSE, help plan the work done at Southeast in concert with a panel composed of the principal, PTA representatives, and teachers. Decisions are made through consensus. The professor of

psychoeducational studies has administered needs assessments to the teachers and self-esteem scales to more than 150 children in an effort to get a benchmark for HUSE's intervention.

The partnership has involved many other elements of HUSE besides professors and students. The vice president for academic affairs of the university, after consultation with the legal department, approved involvement at Southeast as a legitimate activity for student and faculty participation; this means that university faculty who work with Southeast may have their academic load at the university reduced, for example. Students can use their supervised elementary school experience as independent study, practicum, or internship. The university considers this partnership an important contribution to the District of Columbia. A member of the board of trustees of the university gave the keynote address at the formal partnership ceremony on November 21, 1989.

PARENT INVOLVEMENT

At the end of October 1989, the parents at Southeast gave an afternoon appreciation tea for HUSE professors and students, with decorations, food, and a program of original student poetry and performances. About 45 parents, including seven men, participated in the middle of the afternoon. More parents dropped by to join the festivities on their way home from work. As HUSE faculty sat with the parents, we asked what they wanted to see happen as a result of the partnership between Southeast and Howard. The parents' list included an after school program for the children, adult literacy programs, GED programs, career counseling, and word processing training.

The parents have started a program especially for boys in the fourth, fifth, and sixth grades. Education research notes that fourth grade is the grade in which Black children begin the achievement decline that lasts all the way through school. "If the achievement gap is to be closed, something must be done for fourth graders. One parent poignantly discussed the need to expose the children to more and better experiences. "If I had known all the things that it was possible to be, I wouldn't be in the life I'm in," she said. The dean and the principal have discussed the possibility of having adult programs that run simultaneously with the children's program during the school day. Security and safety problems are such that night school may not be an option. Also, many of the parents are young single mothers who are available during the day because they do not work outside the home; this is the first group of parents HUSE will target for assistance.

INVOLVEMENT WITH OTHER AGENCIES

Conversations with the commissioner of social services for the District of Columbia began in 1990 in an effort to coordinate AFDC client training, childcare, and other job training opportunities for Southeast parents. Recent reorganizations in social services mean that negotiations must begin again in 1991-92. The commissioner has agreed to work with us to coordinate family education, childcare, and mentoring. The dean of the School of Nursing at Howard has expressed interest in coordinating the provision of parent health training. The school has gifted and talented students who would benefit from a variety of academic and nonacademic experiences on the campus of Howard University. Constant informal contact among the coordinators, the principal, and the PTA president provide feedback.

Much of the work done by HUSE involves helping the principal coordinate services that must be made available by the District of Columbia Public Schools (DCPS). (The principal, a fine and hardworking individual who cares desperately about the children, was one of the few in the city to have her contract renewed and made permanent.) Discussions have been initiated with the Children's Education Foundation, an early childhood advocacy group. The Washington Urban League provides career training for parents and mentors for classrooms. The Urban League has trained more than 50 Howard students and university employees to tutor the children in reading, mathematics, and city survival skills.

In May 1991, the District of Columbia Public Schools awarded HUSE an \$80,000 contract to examine the school system's goals, curriculum (K-12), staff development needs, and philosophy. This contract, along with more than \$40,000 of in-kind contributions from HUSE, shows the relationship that has developed between the university and DCPS. HUSE professors also serve on a variety of DCPS committees that are setting standards for new teachers and for a variety of subject areas such as art, mathematics, business, and social work. Special education program reviews are being planned, as well as separate contracts for the review of early childhood programs, because of new laws regarding 3-year-olds.

The intensive involvement with Southeast and the concern for its children shown by the faculty, staff, and students at HUSE have led to a close working relationship in a variety of DCPS arenas. At the end of the first year of involvement, HUSE was awarded the District's "Outstanding Partner in Education" award by the superintendent. Three other outstanding partners were McDonald's, Chesapeake and Potomac Telephone, and IBM. HUSE won its award through sweat equity and people power.

REAL-WORLD LEARNING FOR HUSE STUDENTS

The undergraduate and graduate students at HUSE have benefited greatly from their experiences at Southeast. One of our student volunteers attended the school as a child and still visits the neighborhood. Several of our students, from small communities in Iowa, got their first taste of inner city ghetto life. Several students from upper income families told the dean, "They're [Southeast students] just like us."

Other students were surprised at how harshly and physically the teachers treated the students in their presence, asking, "What do they do when they don't have visitors?" We told the students that they were to observe good practice and bad in order to find their own philosophy of schooling and their own style of practice.

A vice president at the university, whose two daughters volunteered, talked about the tremendous change in one daughter, a graduate student in counseling psychology. She began to understand the relative advantages that she enjoyed while growing up and she became less shy as a result of her experience. The other daughter, a practicing attorney, was trying to start a dance troupe at the school.

Several of the students wondered why Southeast students said math was their favorite subject, yet got horrible grades in mathematics. Two years later, these observations were prophetic when District schools scored next to the bottom among the 50 states in mathematics.

Outraged letters to the editor from parents across the city noted the fact that the students thought they were expert mathematicians; some had received high classroom grades even while scoring low on standardized achievement tests.

EVALUATION

We have not yet looked at Southeast student achievement data in great detail because we haven't been there long enough. We believe that indicators such as attendance increases, disciplinary procedure decreases, reduced failure rates, higher grade point averages, greater promotion rates, more talented and gifted placements, and more person hours of parent involvement must be systematically evaluated during the 1991-92 school year. During the following school year, we will examine achievement test score data.

WHAT IS STILL NEEDED

Much of the remaining work must be done with the teachers. The teachers need as many professional development activities as possible. They need retreats and conferences and teaching materials. They need to learn how to use tests and their results appropriately, and how to use computers for instruction, classroom management, and clerical assistance. The majority of the staff have been there 20 years or more; one teacher, for more than 35 years; the counselor, 30 years. These teachers remember students who were better prepared, from more stable, two-parent families with fewer problems. They need to refresh their skills in light of the changes in the student body.

The teachers need to take the summer and much of the next academic year to plan instruction and to reinvigorate the academic program. Many models exist; there is no need to reinvent the wheel here. What is needed is an intervention that brings knowledge about school improvement to Southeast Elementary School in a way that is focused and planned. Teachers need the opportunity to examine strategies that work, such as the Comer process, cooperative learning, and Reading Recovery.

Many of the children need rescue. One professor discussed the possibility of HUSE staff adopting families informally. The children need as many field trips as possible to the university and other pleasant places outside of the neighborhood. Many children already have expanded their horizons through their interactions with the young people from HUSE.

There is a need to coordinate with and bring in a variety of experts on academic topics, organizational development, drug abuse prevention, community development, parent education training, and adult learning, without overloading the school or the teachers. There is almost no way to overload the students, who need the widest possible exposure to adults who are functioning efficiently in professions or trades.

Money is necessary, however. The partnership needs a van to transport university people and Southeast students to and from the campus. Teachers should be paid to work on systematic planning and curriculum revision during the summer. University professors who are on 10-month contracts should be paid to begin formal documentation and analysis of the process while helping

to plan with parents and teachers. HUSE needs money to provide graduate and undergraduate assistantships for its students. Student volunteers could spend more time and gain more from the experience if they could be on-site for longer periods of time. For less than \$125,000 per year, many of the plans and dreams of the staff and parents of Southeast can come true.

FOUR LESSONS ON SCHOOL CHANGE

The Howard University/Southeast Elementary partnership illustrates that all participants have much to gain from the hard cooperative work that school change involves. Although the focus of this paper is on what seems to be working, it is clear that the New American Schools must also be aware of what research and practice has shown will not work. These lessons must be so well learned that they become a part of the conventional wisdom of reform. I would like to close with four lessons about school change that must be taken into account in any successful reform effort.

The First Lesson is This: We Already Know How to Teach Every Child

This includes poor children, minority children, children with limited English proficiency and those with special needs. A variety of technologies, techniques, and processes are known to be successful—the Comer process, Cooperative Learning, Reading Recovery, Success for All, Milliken Schools, Effective Schools, and Accelerated Learning are examples of what works. What is needed is the will. Teachers already in the classroom and new teachers must be given the skills and knowledge to apply what researchers know to be effective. We also know that the principal plays an extremely important role in the process of change. His or her acknowledgment that change is necessary is a requirement for change to occur.

The Second Lesson is This: The Process of Change is Disconcerting, Threatening, and Slow

Those who are interested in changing the schools must understand that there is no quick fix. The transition to effectiveness takes 3 to 7 years. School reform must occur on a school-by-school basis across more than 15,000 school districts in more than 95,000 buildings.

As the nation prepares to re-invent schooling—through strategies including privatization, goal setting by politicians, greater business involvement, and choice or parent/community involvement—it is essential that teachers, administrators, and their associations be brought along. Without their active and cooperative participation, all reform efforts are doomed to failure. Yet, in Charles V. Hamilton's words:

No profession welcomes such intrusion from laymen. This is quite understandable; professionals have a vested self-interest. All those years of college courses and practice teaching and certifying exams, all those credentials of legitimacy may be going by the board. But that is exactly what happens in cities where new groupings—alienated from traditional norms—rise to make new normative demands. It is disturbing, disruptive, painful. It is change. (1968)¹

Administrators and teachers must be consulted, treated as professionals, and convinced that the process of change is in their best interest. Given the changed nature and learning styles of today's generation of MTV, computer-fearless, money-motivated students, teachers nationwide may be slightly out of touch. While we prepare for New American Schools, we must begin to revamp Old American Schools, which will continue to enroll the majority of students for the foreseeable future. Personnel expenditures consume 70 to 80 percent of the typical big city school district budget; retooling and retraining teachers may be the most cost-effective and best educational investment.

The involvement and acceptance of grassroots participants is a key element in successful programs. Parents must become an integral part of planned change. Their participation lends legitimacy to the process and ensures that the goals of school reform remain on target. Consonance between the aims of home and school is an important feature of successful change.

The Third Lesson is This: The Nation's Increasing Demographic Diversity Cannot Be Ignored

Diversity is current reality, not a prediction of what is to come. It would be a sign of national strength and not weakness if diversity were considered an asset and not a liability. By the turn of the century, minorities will make up about 34 percent of the public school population. In California and Texas, the bellwether demographic States, "minority" students are now the majority. The needs of an ethnically diverse school population must be more than accommodated if the nation is to fulfill its potential, regain its competitive position in the global economy, and solve its pressing fiscal and social problems. Business Week gets right to the heart of the matter:

Once upon a simpler time not so long ago, workforce meant white men in ties or blue collars.... But with a plentiful labor supply, few employers had to reach beyond the male Caucasian in his prime except for the least wanted jobs.... The decline in birth rates after 1960 has slashed the numbers of young people available to fill jobs right up to the year 2010 and maybe beyond. The years of picky hiring are over. Employers must look to the nonmale, nonwhite, nonyoung.²

Tomorrow's students and tomorrow's entry-level workers will be increasingly nonwhite. The New American Schools must find solutions to the achievement problems of minority youngsters, for it is the achievement of these students that partially determines how schools are judged. One urgent strategy is to increase the pool of minority teachers to more than 5 percent of the profession by the year 2000, so that children can see all types of adults in the full range of roles and responsibilities in society.

The most pressing problem today concerns the academic achievement of native-born black males. The solution to schooling problems of black males provides the linchpin to address a number of related problems—joblessness, crime, and poor health. Obtaining better schooling and higher achievement is the only reliable, legitimate way out of the ghetto, even though the average salaries of black male college graduates are just beginning to approach the level of white male high school graduates.

New American Schools can find solutions to these special achievement problems. Helpful insight into what works for young black males is already being provided by processes such as those

used by James Comer's School Development Program in New Haven, Connecticut, schools; Spenser Holland at the Center for Educating Black Males at Morgan State (which provides black male role models to young people in Baltimore schools); and the Aetna Saturday Academy in Hartford. What is needed is a process to change the negative interconnections between black males and the schools into explicit, positive interactions for success. Athletic programs offer a model of what can be achieved when attainable goals and performance standards are set and communicated and the rewards and risks of nonperformance are spelled out in a fair way that applies to everyone.

The Fourth Lesson is This: School Reform Will Cost Money

Businesses know that computers, legal pads, pencils, consultants, buildings, and salaries cost money. Why do people believe that schools can operate effectively without money? Schools have been given too many functions in addition to their manifest function to deliver literacy, numeracy, and analytic skills. We now expect schools to prevent drug abuse, report child abuse, teach driving, and provide values, while acting as babysitters for working parents. There is no denying that, in some communities, the school is the locus of stability in the lives of children. It is clear that the number of functions we expect the schools to fulfill will not diminish. We must provide more money to get all of these jobs done. Wherever there are programs there must also be budgets or resources.

CONCLUSION

The Howard University School of Education sees itself involved in Southeast Elementary over the long term as a resource and bringer of other resources. Although school improvement typically takes 3 to 5 five years, we see ourselves involved for longer than that; in fact, we see Southeast Elementary as our professional development school. That is, Southeast can become a real-world training site for the teachers, counselors, educational psychologists, counseling psychologists, and curriculum specialists enrolled at HUSE. Our professional development school happens to be in the middle of the crack cocaine war zone, with children whose life chances couldn't be worse. What has HUSE to lose by taking this risk? NOTHING. And we certainly can't risk losing another generation of poor children.

NOTES

1. Hamilton, C.V. "Race and Education: A Search for Legitimacy," Harvard Educational Review, 38(4) (Fall, 1968):55.
2. "Human Capital: The Decline of America's Work Force/Special Report", Business Week, September 19, 1988, pp. 100-141, p. 112.

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**ACHIEVING FUNDAMENTAL CHANGE IN EDUCATION
WITHIN AN AMERICAN INDIAN COMMUNITY:
ZUNI PUBLIC SCHOOL DISTRICT, NEW MEXICO**

**Hayes Lewis, Superintendent
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In a dramatic example of education reform, the Zuni community withdrew from a school system perceived as failing to educate Zuni children and created its own independent public school district. Rejecting a school system it considered unresponsive and racist, the community founded its new education system on principles drawn from Zuni culture. For example, the community strongly supported the new education goals, which were defined through the community's traditional process of consensus-building. Similarly, instruction in the new system emphasized cooperative learning, a model consistent with the traditional learning style of the Zunis.

This summary illustrates how a community which considers itself excluded from the education process can become involved, take control, and fundamentally transform its education system to more effectively meet the needs of its children.

INTRODUCTION

The Zuni Public School District in New Mexico has dramatically turned education around for its 1,750 students, 98 percent of whom are Zuni Indians. The dropout rate, formerly the highest in the state, fell from 46 percent of all students in grades 9-12 in 1980 to 10 percent in 1990. During the same period, school attendance rates jumped from 76 percent to 92 percent, and American College Testing (ACT) scores rose from 8.0 to 16.1 (on a scale from 1 to 36).

The Zuni community has transformed its education system through tribal leadership, public referendum, staff development, integrated support services, parental involvement, and integration of Indian culture into every aspect of schooling. The school system has drawn on the principles of TheodoreSizer's Coalition of Essential Schools to develop cooperative learning in the belief that the strategy of teachers as coaches and students as active workers best fits the traditional learning style of the Zuni Indian culture. This example offers valuable lessons for other communities, particularly American Indian communities, in how to take responsibility for their education system and fundamentally transform it to better serve their students.

SETTING

The school district and the Zuni Indian Reservation share common boundaries, starting 140 miles west of Albuquerque and stretching to the Arizona border, extending into two counties: McKinley and Cibola. Eighty-five percent of the 1,750 students receive Chapter 1 services, and the same proportion receive free or reduced-price lunch. Ninety-eight percent of the students are Zuni, and most live on the reservation.

Over half the school district staff of 254 are Indian, primarily Zuni. Thirty of the 136 certified teachers are Zuni; 12 are from other Indian tribes. Four of the 12 administrators are Zuni, two from other Indian tribes, and two Hispanic. Ninety-nine percent of the support staff are Zuni, including aides, bus drivers, custodial staff, secretaries, and home/school liaisons. The superintendent and four members of the board of education are Zuni, and one member is Paiute.

Currently, the district operates four schools:

- Dowa Yalanne Elementary (K-5);
- Zuni Middle School (6-8);
- Zuni High School (9-12); and
- Twin Buttes High School (7-12), an alternative high school.

The district also operates a special education preschool for developmentally disabled 3- and 4-year-olds. Plans are underway to open a second elementary school (K-5) next year, since the present elementary school serves 850 students. Although faculty try to give it the feel of a small school through small classes and individual attention, this is a larger number of students than the community would like.

NEED FOR CHANGE

During the 1975 school year, parents of 135 Zuni Indian students in grades 9-12 in the Gallup-McKinley district refused to send their children to school. The children dropped out. County school officials identified the problem as academic deficiencies and lack of adjustment among the students. However, tribal and community leaders believed that the real reason Zuni students had the highest dropout rate in the state was the nature of the school system itself, which they described as inadequate, inflexible, unresponsive, and racist. Low attendance rates and low test scores were felt to be additional symptoms of this fundamental problem.

In 1976, the Zuni tribe set up an alternative program for high school dropouts and children who refused to attend Zuni High School. Although the creation of the program improved opportunities for former dropouts, it did nothing to improve conditions for those students in the regular Zuni High School, where nearly half the students continued to drop out. Parents and other members of the community still did not participate in decisions determining the education of their children.

GAINING COMMUNITY CONTROL UNDER TRIBAL LEADERSHIP

The Zuni tribe provided the impetus for fundamental, structural change. Efforts to gain community control of the school system were led by tribal representatives Ralph Casebolt, Hayes Lewis, and a four-member Zuni planning staff. Lewis became interim superintendent of the Zuni Public Schools when the new school district began operations in 1980.

In 1978, the tribe received a Self-Determination and Assistance grant from the Bureau of Indian Affairs (BIA) to conduct feasibility studies regarding community control of the schools. The tribe explored staffing needs, staff development, educational methods, financial feasibility, legal issues, and political strategy.

The formal, political process to form an independent public school district involved several stages. In 1978, the tribe obtained permission from the existing local County School Board to deconsolidate. The next year, Zuni voters passed, by a ratio of 3:1, a community-wide referendum allowing the Zuni Tribe to continue its efforts to create an independent school system. The tribe then was able to work with the New Mexico State Department of Education on accreditation and instructional services plans. In January 1980, the State Board of Education unanimously approved the creation of the Zuni Public School District.

Throughout this four-year process, tribal leaders encouraged community involvement and public discussions of what was best for the children and how to translate these priorities into school and tribal policies. Community discussions served two purposes. The first was to build a sense of ownership among people who had not previously felt empowered to change the school system to make it more effective in educating their children. The second purpose was to develop a vision from their expectations and priorities to provide clear direction for school administrators.

In these discussions, people assessed what was good about the existing school system and what had to change. They discussed what their children were learning academically and about their culture and values. People explored which educational models were appropriate for their community and ways in which they needed to be tailored to the Zuni community. The goal was to open the discussion to all views and reach agreement on major points that everyone could support. People agreed that they needed to gain control of the education system, despite some unfounded fears that certified teachers might be replaced by unlicensed Zuni citizens. At this early stage, however, the community was not able to reach agreement on whether or not to implement a bilingual and bicultural curriculum. Many of the parents felt that the home was the place to teach culture and values. Therefore, the school system did not begin developing its bilingual/ bicultural curriculum until ten years later, when the consensus of the community changed to support this objective.

These early discussions provided the foundation for the new school system. Similar discussions today continue to provide feedback on what is working and the impact on students. The question is continually asked: "What is in the interest of the students?" The position of the superintendent is that the parents and tribal community are the strongest basis on which to build "break the mold" programs. He has expressed concern that bureaucratic processes inhibit change without this kind of community involvement.

GOALS

As reflected in the school district's vision statement and priorities for 1991-92 on page 5, its goals focus on empowering the students, parents, and staff; developing higher-order thinking skills; improving communication skills; increasing student attendance, achievement, and graduation rates; promoting self-esteem and mutual respect; encouraging students' career opportunities; working with the tribal government and local agencies to create a drug-free community; and strengthening bilingual and bicultural learning.

Although these goals have remained fairly constant over time, they have evolved somewhat because of changing needs and community priorities. For example, priority #4 on page 5 has been revised this year, and priorities #9 and #10 are new. They reflect parents' growing support for school instruction in the Zuni language and culture and school efforts to lead parents beyond making toys and holding bake sales into active, shared decision-making with school site staffs.

The goals of the Zuni Public Schools are consistent with the goals developed by the Indian Nations At Risk Task Force, using the National Education Goals as a foundation. In December 1991, the Zuni Board of Education unanimously resolved to adopt the goals of the Task Force and support school and community efforts to achieve them by the year 2000.

DESCRIPTION

Elementary school class size is limited to 20 students or fewer, averaging 17. Two professionals work together in each classroom; at least one of them is Zuni and one a certified teacher. Secondary schools average 80 students per teacher. In the old system, the ratio was 120:1.

The district gives great importance to strong academics. The teaching strategy applied throughout the district emphasizes cooperative learning, whole language, and interdisciplinary approaches in thematic units. This strategy supports the traditional Zuni learning style and draws on the Coalition of Essential Schools model, discussed on the next page.

High school provides a career bridge. The students go on site visits to technical schools and universities. Students have access to a computer network for technical vocational schools. All seniors will soon be required to perform community service. By December of the students' senior year, they must have a definite goal and plan for career, college, or military service.

The schools work hard to create a safe environment for their students and the community. Students learn coping skills for alcohol and drug prevention through DARE and other programs. Given the high rate of alcoholism, anti-drug efforts have strong personal relevance and impact. School leaders recognize their responsibility to influence the community. They see alcoholism as child abuse. They have rejected dysfunctionality as the norm and have begun working with parents to improve supportive efforts for children and families. District leaders have met with the tribe to discuss drug abuse and family violence. To increase community collaboration, the district prepared a position paper outlining what the tribe and its agencies need to do to support district efforts in overcoming areas of community dysfunctions.

ZUNI PUBLIC SCHOOL DISTRICT

Vision Statement

The vision of the Zuni Public School District is to empower a community of learners who dare to dream, take risks, and develop new realities. It is, therefore, the intent of the district to create a thoughtful and nurturing environment in which all stakeholders collaborate in restructuring the system to better meet the needs of students, now and in the future.

Priorities for the 1991-92 School Year

1. Implement collaborative ways of teaching, learning, and assessment that will promote higher order thinking, creativity, independent study skills, and academic excellence.
2. Implement programs and activities that will continue to positively develop respect for self, others, and the environment.
3. Improve communication within the district and with the Zuni community.
4. Provide programs and opportunities to improve Zuni and English language communication skills for all students and staff.
5. Improve student attendance and decrease tardiness and dropout rates.
6. Work in collaborative ways with students, staff, and parents to develop learners empowered to restructure schools and the community.
7. Create a climate of high expectations for students and staff by providing personal, educational, career planning support.
8. Maintain drug-free school environments for all students and staff, and continue to work with local agencies to create a drug-free community.
9. Develop a comprehensive K-12 bilingual/bicultural curriculum and training plan.
10. Provide opportunities that will promote increased parental involvement in schools and educational decision making.

Zuni cultural values are respected. A committee consisting of parents, Tribal Council education liaisons, teachers, and district administrators sets the school calendar annually, observing the tribal spiritual calendar, tribal holidays, and religious events. For example, the school calendar in December reflects spiritual practices of the tribe and allows families within clans to take offerings to the plaza for their spiritual leaders. During fasting periods, Zunis are prohibited from eating foods containing animal products. In keeping with this tradition, school cafeterias serve only those foods that can be eaten: cereals, grains, and fruit juices instead of milk and other animal products.

THE COALITION OF ESSENTIAL SCHOOLS MODEL

When the appropriateness of different models was assessed, Theodore Sizer's Coalition of Essential Schools was considered to offer the best fit with the traditional learning style of the Zuni people. The cooperative learning style relies on students as active workers and teachers as coaches and emphasizes personalized teaching.

Just as the district began to focus on this approach, the New Mexico State Department of Education invited it to participate with two other districts in a pilot project called "New Mexico Re: Learning," based on Sizer's principles. The Re:Learning strategy can be tailored to the unique characteristics and needs of each school and community. The superintendent and others felt that the strategy adapted well to tribal communities and reinforced tribal concepts of responsibility and self-determination.

TRIBAL INVOLVEMENT

The Zuni tribe continues to provide leadership and support for the school system. Each month, the superintendent, school principals, and teachers report to the Tribal Council and hear its views, in contrast to the old system, in which no one came to talk with the tribe about education. Two tribal councilmen serve as school district liaisons and education advocates on the Tribal Council. They attend school board meetings and special events at the schools. Tribal Council members also have addressed student assemblies. High school social studies students and teachers have met with the Tribal Council. The student body elects representatives to spend one day shadowing Tribal Council members to gain a better understanding of Zuni tribal government and responsibilities.

The tribe also has provided needed financial support. For example, although state money was available to carry out the first phase for development of the new elementary school, budget constraints eliminated any further state investment in the project. Local property tax funds were an impossibility, because land on the reservation is not taxable. In an unusually large contribution, the Tribal Council provided the remaining \$1.7 million needed to complete the project. The tribe also supports Zuni Public Schools' sports teams, paying for lodging and transportation and enabling their participation in the state cross country and basketball championships.

PARENTAL INVOLVEMENT

The district has demonstrated innovative ways to increase parent involvement. To encourage parents to work with the teachers, secondary schools have adopted the elementary school practice of holding parent-teacher conferences at report-card time. School leaders emphasize to parents the importance of standardized testing and offer breakfast and snacks for children on days of the tests. The school board holds its meetings at different schools in the district on a rotation basis and schedules student presentations or performances for the same occasion to draw in parents. Parents reportedly pack the gym when there are recognition ceremonies honoring their children or other special events. The Parent-Teacher-Student Organizations (PTSOs) are described as active.

Five years ago, Zuni Parents for Educational and Community Improvement, Inc., was created to make parents partners in restructuring the school system. Known as Parents Inc., the non-profit organization provides an opportunity for parents to develop leadership skills, which they may use to become members of the PTSOs, school board, or Tribal Council. Parents, Inc., has enlisted the help of Save the Children and Vista and obtained grants from the federal and New Mexico state governments. Parents, Inc., has successfully secured funding for a variety of programs, including Gifted & Talented enrichment, bilingual development, and a pregnancy prevention and child development program for students who are parents.

STAFF DEVELOPMENT AND ORIENTATION

Staff development emphasizes teaching strategies and educational reform and features on-site visits by experts from Stanford University and other locations. Wednesday afternoons are reserved for a half day of professional development every other week; elementary and secondary school staff alternate weeks. In addition, four full days a year are devoted to inservice professional development.

The Educators' Support Plan developed in the district pairs up each new teacher with an experienced teacher to serve as mentor. They meet after school and classroom visits are made each month.

In addition to making sure that each elementary school classroom has one Zuni teacher, extensive orientation is conducted for all teachers who are not Zuni to develop better cultural understanding and appreciation. Before each major Zuni holiday or other special event, the curriculum resource person conducts a workshop. For example, Shalako—the blessing of the houses—is the most important event of the year. It is the reenactment of the creation of the Zunis. Non-Zuni teachers learn why the ceremony is important and what parts of it are open to them. In addition, non-speakers take a special course in the Zuni language, designed to increase their awareness about grammar, structure, and other aspects of the language, not to develop fluency.

RESULTS

Through ten years of restructuring, the Zuni Public School district has managed to raise school attendance rates from 76 percent to 92 percent. It has cut the dropout rate from 46 percent of all students in grades 9-12 in 1980 to 14 percent in 1991, which compares favorably to the state rate of 10 percent. As another indicator of the success of the multidimensional community-wide efforts, the suicide rate among Zuni students has dropped to zero, after being one of the highest in the United States. The district reports that 28 percent of 1990-91 Zuni graduates went on to colleges or universities, and another 8 percent enrolled in postsecondary vocational or technical schools.